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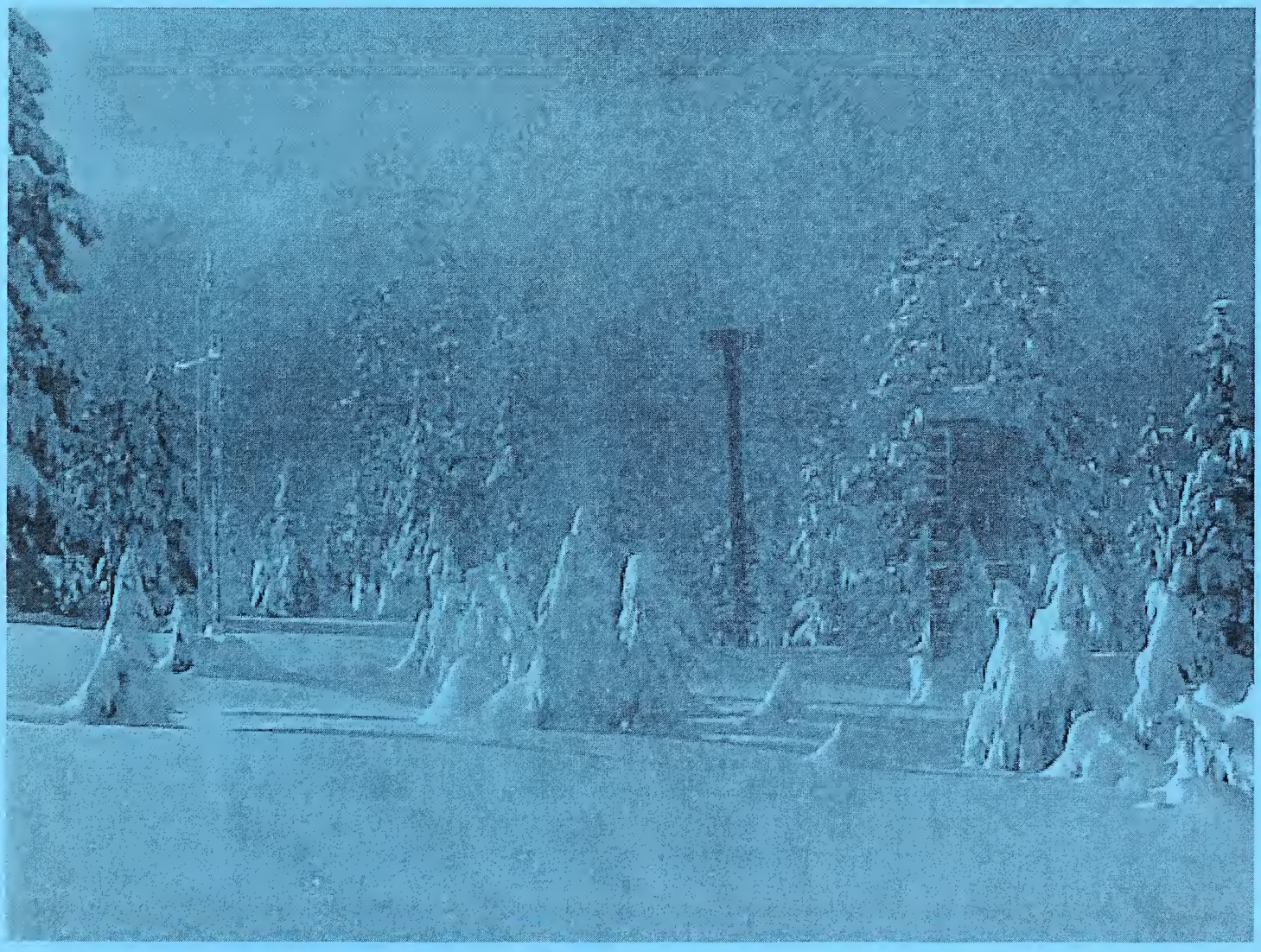
Resources
Conservation
Service

Washington
Water Supply Outlook Report
March 1, 2007



Water Supply Outlook Reports
and
Federal - State – Private Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Washington
Water Supply Outlook

March 2007

General Outlook

February was a relatively dry month with mostly below average precipitation and snowfall. That is until the last week or two of the month where Washington saw, once again, traffic stopping snow from sea shore to mountain top. At many mountain locations snowpack increases were measured in feet not inches during this period, giving us a much need shot in the arm in order to keep our averages and streamflow forecasts near or above normal for the majority of the state. Short term weather forecasts predict a good chance of below normal temperatures and above normal precipitation through the end of the month. 90-day predictions keep us in a warm pattern with a good chance at normal precipitation going into summer. Washington streams have not experienced a significant increase from the recent warm period due to early snow melt.

Snowpack

The March 1 statewide SNOTEL readings were 116% of average, down 4% from February 1. The Lower Snake River Basin snow surveys reported the lowest readings at 78% of average. Readings in the Cedar River area of King County reported the highest at 142% of average. Westside averages from SNOTEL and March 1 snow surveys included; the North Puget Sound river basins with 126% of average, the Central Puget river basins with 130%, and the Lewis-Cowlitz basins with 115% of average. Snowpack along the east slopes of the Cascade Mountains included the Yakima area with 109% and the Wenatchee area with 106%. Snowpack in the Spokane River Basin was at 98% and the Walla Walla River Basin had 95% of average. Maximum snow cover in Washington was at Martin Ridge SNOTEL in the Baker River Basin, with water content of 73.6 inches. Martin Ridge is a new SNOTEL installed summer of 2006. The highest average in the state was at Skookum Creek SNOTEL in the Tolt River watershed with 173% of average.

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Spokane	98	98
Newman Lake	104	106
Pend Oreille	85	88
Okanogan	101	106
Methow	96	108
Conconully Lake	89	120
Wenatchee	95	105
Chelan	103	95
Upper Yakima	97	116
Lower Yakima	86	102
Ahtanum Creek	83	102
Walla Walla	89	95
Lower Snake	92	78
Cowlitz	98	107
Lewis	86	124
White	84	97
Green	100	114
Puyallup	89	109
Cedar	96	142
Snoqualmie	97	124
Skykomish	93	117
Skagit	108	114
Baker	112	133
Nooksack	116	132
Olympic Peninsula	139	130

Precipitation

During the month of February, the National Weather Service and Natural Resources Conservation Service climate stations reported varied precipitation totals throughout Washington river basins. The highest percent of average in the state was at Glenwood WA which reported 204% of average for a total of 8.93 inches. In contrast Mazama reported the lowest monthly total with only .34 inches or 16% of the average. The wettest spot in the state was reported at Swift Creek SNOTEL with a February accumulation of 24.3 inches. Most basins reported near to below average precipitation for February. Olympic Peninsula Basin reported the lowest with only 62% of average for the month and Lower Snake had the highest with 103%.

RIVER BASIN	FEBRUARY PERCENT OF AVERAGE	WATER YEAR PERCENT OF AVERAGE
Spokane	99	112
Colville-Pend Oreille	94	111
Okanogan-Methow	84	115
Wenatchee-Chelan	77	119
Upper Yakima	85	119
Lower Yakima	86	124
Walla Walla	100	106
Lower Snake	103	103
Cowlitz-Lewis	92	108
White-Green-Puyallup	91	114
Central Puget Sound	91	118
North Puget Sound	80	116
Olympic Peninsula	62	102

Reservoir

Seasonal reservoir levels in Washington vary greatly due to specific watershed management practices required in preparation for irrigation season, fisheries management, power generation, municipal demands and flood control. Reservoir storage in the Yakima Basin was 524,000-acre feet, 105% of average for the Upper Reaches and 180,000-acre feet, 131% of average for Rimrock and Bumping Lakes. Storage at the Okanogan reservoirs was 101% of average for March 1. The power generation reservoirs included the following: Coeur d'Alene Lake, 128,000 acre feet, 88% of average and 53% of capacity; Chelan Lake, 343,000-acre feet, 137% of average and 51% of capacity; Skagit River reservoirs at 100% of average and 60% of capacity and the Cowlitz – Lewis reservoir systems with 2,641,000-acre feet of storage.

BASIN	PERCENT OF CAPACITY	CURRENT STORAGE AS PERCENT OF AVERAGE
Spokane	53	88
Colville-Pend Oreille	43	86
Okanogan-Methow	73	101
Wenatchee-Chelan	51	137
Upper Yakima	63	105
Lower Yakima	78	131
Lower Snake	72	110
Cowlitz-Lewis	N/A	N/A
North Puget Sound	60	100

For more information contact your local Natural Resources Conservation Service office.

Streamflow

Forecasts vary from 121% of average for the Cedar River at Cedar Falls to 80% of average for Snake River below Lower Granite Dam. April-September forecasts for some Western Washington streams include the Dungeness River near Sequim, 105%; White River, 101%; and Skagit River, 106%. Some Eastern Washington streams include the Yakima River near Parker, 111%: Wenatchee River at Plain, 113%; and Spokane River near Post Falls, 96%. Volumetric forecasts are developed using current, historic and average snowpack, precipitation and streamflow data collected and coordinated by organizations cooperating with NRCS. Caution should be used when using early season forecasts for critical water resource management decisions.

Statewide February streamflows were mostly near average primarily with a few exceptions of above and below normal runoff. The Similkameen at Nighthawk had the highest reported flows with 137% of average. The Dungeness River near Sequim with 67% of average was the lowest in the state. Other streamflows were the following percentage of average as reported by the River Forecast Center: the Cowlitz at Castle Rock, 85%; the Spokane at Spokane, 85%; the Columbia below Rock Island Dam, 81%; and the Bumping near Nile, 81%.

BASIN	PERCENT OF AVERAGE (50 PERCENT CHANCE OF EXCEEDENCE)
Spokane	96-101
Colville-Pend Oreille	96-103
Okanogan-Methow	109-117
Wenatchee-Chelan	104-115
Upper Yakima	113-114
Lower Yakima	89-114
Walla Walla	100
Lower Snake	80-95
Cowlitz-Lewis	89-105
White-Green-Puyallup	101-112
Central Puget Sound	110-121
North Puget Sound	105-106
Olympic Peninsula	102-105

STREAM	PERCENT OF AVERAGE FEBRUARY STREAMFLOWS
Pend Oreille Below Box Canyon	80
Kettle at Laurier	68
Columbia at Birchbank	84
Spokane at Long Lake	82
Similkameen at Nighthawk	137
Okanogan at Tonasket	102
Methow at Pateros	138
Chelan at Chelan	111
Wenatchee at Pashastin	94
Yakima at Cle Elum	98
Yakima at Parker	102
Naches at Naches	112
Grande Ronde at Troy	88
Snake below Lower Granite Dam	72
SF Walla Walla near Milton Freewater	153
Columbia River at The Dalles	79
Lewis at Ariel	78
Cowlitz below Mayfield Dam	86
Skagit at Concrete	92
Dungeness near Sequim	67

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BASIN SUMMARY OF SNOW COURSE DATA

MARCH 2007

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
ABERDEEN LAKE CAN.	4000	3/02/07	24	5.4	5.3	5.7
AHTANUM R.S.	3100	2/27/07	19	5.1	8.4	7.0
ALPINE MEADOWS	3500	3/05/07	98	39.0	43.2	33.8
ALPINE MEADOWS SNTL	3500	3/01/07	126	51.7	50.9	36.5
AMBROSE	6480	2/27/07	42	9.4	8.3	10.5
ASHLEY DIVIDE	4820	2/27/07	22	4.9	5.3	6.2
BADGER PASS SNOTEL	6900	3/01/07	77	26.8	27.8	29.7
BAIRD #2	3220	3/01/07	30	7.9	8.0	--
BAREE MIDWAY	4600	2/28/07	84	24.6	30.7	28.7
BAREE TRAIL	3800	2/28/07	44	11.8	12.8	8.2
BARKER LAKES SNOTEL	8250	3/01/07	51	12.2	11.0	11.1
BARNES CREEK CAN.	5320	3/02/07	56	17.2	15.6	17.3
BASIN CREEK SNOTEL	7180	3/01/07	29	6.3	6.6	6.1
BASSOO PEAK	5150	2/23/07	35	9.0	8.7	9.0
BEAVER CREEK TRAIL	2200	2/25/07	53	17.1	16.0	13.0
BEAVER PASS	3680	2/26/07	102	34.7	29.3	24.9
BEAVER PASS SNOTEL	3680	3/01/07	121	44.6	40.8	33.9
BIG WHITE MTN CAN.	5510	3/01/07	56	16.5	20.3	16.8
BLACK MOUNTAIN	7750	2/27/07	54	13.6	11.7	11.4
BLACK PINE SNOTEL	7100	3/01/07	36	8.6	8.9	10.1
BLACKWALL PEAK CAN.	6370	3/01/07	---	34.2	26.9	30.0
BLEWETT PASS#2SNOTEL	4270	3/01/07	48	20.7	16.9	15.7
BLUE LAKE	5900	2/25/07	58	18.5	18.2	21.1
BRENDA MINE CAN.	4450	3/01/07	---	15.3	13.4	11.3
BROOKMERE CAN.	3000	2/27/07	33	10.5	7.2	7.6
BROWN TOP AM	6000	2/25/07	159	63.6e	56.2	53.4
BROWNS PASS		2/26/07	29	7.2	5.4	--
BRUSH CREEK TIMBER	5000	3/01/07	---	6.9E	6.3	7.5
BULL MOUNTAIN	6600	2/23/07	18	3.8	6.2	5.1
BUMPING LAKE (NEW)	3400	3/01/07	68	20.6	22.2	16.9
BUMPING RIDGE SNOTEL	4600	3/01/07	88	30.2	32.8	24.9
BUNCHGRASS MDWSNOTEL	5000	3/01/07	75	20.7	30.5	24.4
BURNT MOUNTAIN PIL	4200	3/01/07	64	18.1	14.0	13.4
BUTTERMILK BUTTE	5250	2/23/07	48	15.2	15.4	--
CARMI CAN.	4100	2/28/07	27	5.8	5.5	5.8
CAYUSE PASS	5300	3/01/07	---	56.9e	--	64.8
CAYUSE PASS SNOTEL	5200	3/01/07	163	56.9	--	--
CHESSMAN RESERVOIR	6200	2/26/07	15	3.6	1.5	3.1
CHEWALAH #2	4930	3/01/07	61	17.1	23.2	--
CHICKEN CREEK	4060	2/27/07	52	14.0	17.4	14.4
CHIWAUKUM G.S.	2500	3/01/07	44	13.5	8.6	10.8
CITY CABIN	2390	3/05/07	21	8.0	9.4	10.2
CLOUDY PASS AM	6500	2/27/07	104	38.5	--	39.4
COLD CREEK STRIP	6020	2/23/07	32	9.2	9.4	--
COMBINATION SNOTEL	5600	3/01/07	20	4.5	4.1	4.5
COPPER BOTTOM SNOTEL	5200	3/01/07	30	6.9	8.3	9.9
COPPER CREEK	5700	2/25/07	25	7.0	9.6	12.5
COPPER MOUNTAIN	7700	2/22/07	31	6.6	9.8	8.9
CORNER CREEK	3150	2/27/07	33	9.0	6.7	6.7
CORRAL PASS SNOTEL	6000	3/01/07	96	30.6	33.7	29.5
COTTONWOOD CREEK	6400	2/27/07	29	6.4	5.8	6.0
COUGAR MTN. SNOTEL	3200	3/01/07	57	17.0	19.7	17.1
COX VALLEY	4500	2/26/07	113	43.0	33.4	31.7
COYOTE HILL	4200	2/26/07	25	6.0	9.6	9.1
DALY CREEK SNOTEL	5780	3/01/07	37	9.2	9.1	9.4
DEER PARK	5200	2/27/07	61	24.9	10.7	15.1
DESERT MOUNTAIN	5600	2/22/07	38	10.0	12.5	12.6
DEVILS PARK	5900	2/26/07	108	42.1e	37.8	37.9
DISAUTEL PASS		2/23/07	22	6.6	7.8	--
DISCOVERY BASIN	7050	2/23/07	46	9.3	6.3	8.4
DIX HILL	6400	2/25/07	32	8.2	9.5	10.0
DOMMERIE FLATS	2200	3/01/07	33	10.0	8.0	7.2
DUNCAN RIDGE	5370	2/23/07	25	6.6	8.0	--
DUNGENESS SNOTEL	4100	3/01/07	31	10.0	7.5	8.9
EAST FORK R.S.	5400	2/27/07	21	4.8	5.9	5.6
EASY PASS AM	5200	3/01/07	---	84.5E	70.8	65.1
EL DORADO MINE	7800	2/24/07	42	9.7	9.2	15.8
ELBOW LAKE SNOTEL	3200	3/01/07	115	45.2	39.5	34.3
EMERY CREEK SNOTEL	4350	3/01/07	51	13.0	13.6	13.3
ENDERBY CAN.	5800	2/24/07	97	35.4	39.4	33.8
ESPERON CK. UP CAN.	5050	2/24/07	41	13.2	14.8	14.6
FARRON CAN.	4000	2/27/07	44	12.2	13.5	11.3
FATTY CREEK	5500	3/02/07	62	17.5	22.9	20.4
FISH CREEK	8000	2/26/07	35	8.1	6.6	7.8
FISH LAKE	3370	3/01/07	96	32.0	40.9	29.9
FISH LAKE SNOTEL	3370	3/01/07	89	30.8	35.3	30.6
FLATTOP MTN SNOTEL	6300	3/01/07	116	35.9	43.9	39.2
FLEECER RIDGE	7500	2/23/07	30	6.3	8.9	9.2
FOURTH OF JULY SUM	3200	3/01/07	44	11.4	10.2	8.2
FREEZEOUT CK. TRAIL	3500	2/26/07	37	11.8	11.5	11.3
FROHNER MDWS SNOTEL	6480	3/01/07	28	6.5	6.2	6.3
FROST MEADOWS	4630	2/27/07	59	20.3	19.0	--
GOAT CREEK	3600	2/27/07	29	6.9	8.9	6.1
GOLD MTN LOOKOUT		2/27/07	43	10.9	13.4	--
GRASS MOUNTAIN #2	2900	2/28/07	32	11.8e	11.7	9.8
GRAVE CRK SNOTEL	4300	3/01/07	50	13.6	16.2	14.5
GREEN LAKE SNOTEL	6000	3/01/07	82	23.5	26.2	19.7
GREYBACK RES CAN.	4700	3/02/07	32	6.7	8.0	7.8
GRIPPIN CR DIVIDE	5150	2/23/07	32	8.3	9.1	9.5
GROUSE CAMP SNOTEL	5380	3/01/07	94	22.3	25.0	17.6
HAMILTON HILL CAN.	4550	3/04/07	40	13.7	8.3	12.7
HAND CREEK SNOTEL	5030	3/01/07	40	9.9	10.3	9.9
HARTS PASS SNOTEL	6500	3/01/07	109	43.7	37.4	39.7
HARTS PASS	6500	2/25/07	103	39.1e	42.7	36.8
HELL ROARING DIVIDE	5770	3/01/07	77	24.3	31.1	25.8
HERRIG JUNCTION	4850	2/27/07	67	21.0	27.8	22.2
HIGH RIDGE SNOTEL	4920	3/01/07	63	21.2	24.2	21.2
HOLBROOK	4530	2/28/07	26	8.6	7.6	8.3
HOODOO BASIN SNOTEL	6050	3/01/07	99	31.7	41.0	38.6
HUCKLEBERRY SNOTEL	2000	3/01/07	10	2.0	1.7	--
HUMBOLDT GLCH SNOTEL	4250	3/01/07	---	10.2	9.8	11.7
HURRICANE	4500	3/01/07	---	18.7e	9.5	15.6
INTERGAARD	6450	2/24/07	27	5.3	4.6	6.2
IRENE'S CAMP	5530	2/23/07	36	9.1	12.2	--
ISINTOK LAKE CAN.	5100	2/28/07	25	5.9	5.4	6.5
JUNE LAKE SNOTEL	3200	3/01/07	137	45.0	48.1	33.9
KELLER RIDGE	3700	2/26/07	26	7.0	6.5	--
KELLOGG PEAK	5560	2/26/07	75	26.8	30.6	25.8
KISHENEHN	3890	2/25/07	39	10.1	8.4	7.3
KIT CARSON PASTURE	4950	2/28/07	26	6.3	7.4	8.2
KRAFT CREEK SNOTEL	4750	3/01/07	32	8.6	12.0	13.6
LAMB BUTTE		2/26/07	60	18.5	18.6	--
LESTER CREEK	3100	2/28/07	67	24.9e	22.6	17.2
LOGAN CREEK	4300	3/01/07	---	6.2E	7.4	6.2
LOLO PASS SNOTEL	5240	3/01/07	77	22.5	29.3	26.8
LONE PINE SNOTEL	3800	3/01/07	119	39.2	40.7	31.7
LOOKOUT SNOTEL	5140	3/01/07	81	25.3	25.8	27.2
LOST HORSE MTN CAN.	6300	2/25/07	33	8.3	6.7	8.0
LOST HORSE SNOTEL	5000	3/01/07	59	17.1	20.4	18.3
LOST LAKE SNOTEL	6110	3/01/07	---	42.3	45.9	50.7
LOUP LOUP CAMPGROUND		2/28/07	46	12.2	13.7	--
LOWER SANDS CREEK #2	3120	2/26/07	58	17.0	19.1	16.6
LUBRECHT FOREST NO 3	5450	3/01/07	16	3.3	4.3	5.6
LUBRECHT FOREST NO 4	4650	3/01/07	6	1.3	2.4	2.7
LUBRECHT FOREST NO 6	4040	3/01/07	8	1.9	3.3	3.2
LUBRECHT HYDROPLOT	4200	3/01/07	20	4.2	5.0	5.1
LUBRECHT SNOTEL	4680	3/01/07	18	4.8	4.4	5.3
LYMAN LAKE SNOTEL	5900	3/01/07	166	58.2	56.0	55.1
LYNN LAKE	4000	2/28/07	67	22.5e	21.7	16.1
MARIAS PASS	5250	2/27/07	47	14.2	14.8	14.9
MARTEN RIDGE SNOTEL	3560	3/01/07	145	73.6	--	--
MAZAMA		2/25/07	30	11.2	12.0	--
MCCULLOCH CAN.	4200	2/28/07	28	6.2	6.8	6.2
MEADOWS CABIN	1900	2/24/07	12	3.7	2.3	5.5
MEADOWS PASS SNOTEL	3240	3/01/07	89	33.0	36.0	19.8
MERRITT	2140	3/01/07	47	10.0	10.1	14.2
METEOR		2/27/07	22	6.6	6.6	--
M P NOOKSACK SNOTEL	4980	3/01/07	135	57.4	48.6	--
MICA CREEK SNOTEL	4750	3/01/07	76	23.4	20.2	23.2
MINERAL CREEK	4000	2/27/07	47	13.6	17.3	15.8
MINERS RIDGE SNOTEL	6200	3/01/07	150	49.9	46.5	45.2
MISSEZULA MTN CAN.	5080	2/24/07	30	9.4	6.7	8.4
MISSION CREEK CAN.	5840	3/01/07	---	15.2	15.7	17.1
MISSION RIDGE	5000	3/01/07	60	19.0	19.1	15.2
MONASHEE PASS CAN.	4500	3/02/07	41	11.5	10.2	11.8
MORRISSEY RIDGE CAN.	6100	3/01/07	---	20.1	24.8	24.1
MORSE LAKE SNOTEL	5400	3/01/07	143	49.1	61.9	47.0
MOSES MOUNTAIN (2)	4800	2/28/07	59	16.5	19.1	17.5
MOSES MTN SNOTEL	4800	3/01/07	53	14.7	20.7	13.4
MOSQUITO RDG SNOTEL	5200	3/01/07	---	29.9	32.1	31.1
MOULTON RESERVOIR	6850	2/26/07	27	5.2	7.6	6.2
MOUNT CRAG SNOTEL	4050	3/01/07	90	29.3	27.6	26.8
MT. KOBAU CAN.	5500	2/25/07	40	12.1	12.4	10.2
MOUNT TOLMAN	2000	2/23/07	8	2.5	3.1	3.3
MOWICH SNOTEL	3150	3/01/07	15	1.3	1.9	--
MOUNT GARDNER	3300	3/05/07	42	18.0	20.8	13.0
MOUNT GARDNER SNOTEL	2860	3/01/07	62	19.4	20.4	14.1
MUTTON CREEK #1	5700	2/23/07	46	16.1	16.4	12.0
N.F. ELK CR SNOTEL	6250	3/01/07	37	9.0	9.4	10.2
NEVADA RIDGE SNOTEL	7020	3/01/07	40	9.9	13.2	13.2
NEW HOZOMEEN LAKE	2800	2/25/07	33	10.2	10.2	10.3
NEZ PERCE CMP SNOTEL	5650	3/01/07	42	10.3	14.0	12.7
NEZ PERCE PASS	6570	2/28/07	41	10.2	14.2	15.7
NOISY BASIN SNOTEL	6040	3/01/07	95	29.6	41.7	33.8
NORTH FORK JOCKO	6330	3/02/07	91	30.2	41.4	36.5
OLALLIE MDWS SNOTEL	3960	3/01/07	145	57.1	59.4	48.9
OPHIR PARK	7150	2/25/07	36	9.4	13.0	14.1
OYAMA LAKE CAN.	4100	2/27/07	29	6.1	6.1	6.2
PARADISE PARK SNOTEL	5500	3/01/07	170	64.1	66.6	59.7
PARK CK RIDGE SNOTEL	4600	3/01/07	127	52.4	48.3	44.1
PETERSON MDW SNOTEL	7200	3/01/07	38	8.2	7.2	7.8
PIGTAIL PEAK SNOTEL	5900	3/01/07	147	49.9	55.1	44.6
PIKE CREEK SNOTEL	5930	3/01/07	61	19.6	23.6	22.8
PIPESTONE PASS	7200	2/22/07	16	3.2	4.2	4.1
POPE RIDGE SNOTEL	3540	3/01/07	68	19.7	19.8	18.5
POSTILL LAKE CAN.	4200	2/27/07	29	8.1	7.4	7.3

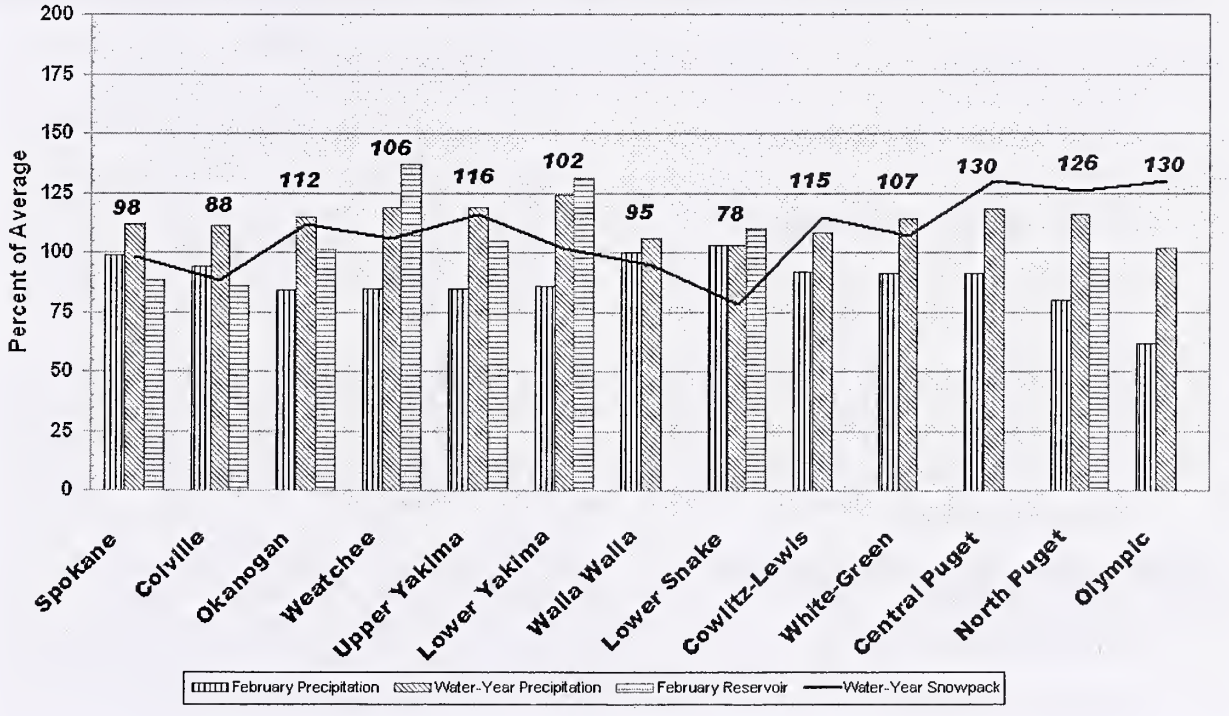
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
POTATO HILL SNOTEL	4500	3/01/07	99	30.4	31.1	23.6
QUARTZ PEAK SNOTEL	4700	3/01/07	74	20.4	23.1	19.5
RAGGED MOUNTAIN	4200	2/25/07	66	21.6	--	17.5
RAGGED MTN SNOTEL	4210	3/01/07	76	22.9	--	--
RAGGED RIDGE	3330	2/28/07	35	8.6	7.1	7.8
RAINY PASS SNOTEL	4780	3/01/07	102	35.8	36.6	38.2
RAINY PASS	4780	2/24/07	103	35.8	38.8	33.8
REX RIVER SNOTEL	1900	3/01/07	106	43.1	40.7	23.9
ROCKER PEAK SNOTEL	8000	3/01/07	45	10.3	12.1	11.2
ROCKY CREEK AM	2100	3/01/07	---	36.0E	35.1	26.5
ROLAND SUMMIT	5120	2/28/07	95	30.8	32.0	29.2
ROUND TOP MTN	4020	2/28/07	53	14.0	12.2	--
RUSTY CREEK	4000	2/23/07	24	7.0	9.3	6.2
SADDLE MTN SNOTEL	7900	3/01/07	71	17.1	23.9	21.8
SAGE CREEK SADDLE	4080	2/27/07	59	17.7	17.0	15.5
SALMON MDWS SNOTEL	4500	3/01/07	45	10.9	12.5	10.1
SASSE RIDGE SNOTEL	4200	3/01/07	109	39.7	34.9	30.3
SATUS PASS	4030	2/28/07	47	13.4	15.5	9.6
SAVAGE PASS SNOTEL	6170	3/01/07	60	19.5	22.7	22.5
SAWMILL RIDGE	4700	2/28/07	83	33.2e	27.5	28.6
SAWMILL RIDGE SNOTEL	4700	3/01/07	105	50.2	--	--
SCHREIBERS MDW AM	3400	3/02/07	151	59.6	54.6	43.5
SENTINEL BT SNOTEL	4920	3/01/07	41	10.3	9.6	--
SHEEP CANYON SNOTEL	4050	3/01/07	129	39.3	33.9	31.6
SHERWIN SNOTEL	3200	3/01/07	---	10.4	8.9	10.8
SILVER STAR MTN CAN.	5600	3/03/07	72	26.2	26.9	25.0
SKALKAHO SNOTEL	7260	3/01/07	62	17.6	21.3	20.2
SKITWISH RIDGE	5110	2/26/07	84	26.7	29.1	27.2
SKOOKUM CREEK SNOTEL	3920	3/01/07	79	32.7	30.7	18.9
SKOOKUM LAKES	4230	2/22/07	36	9.9	12.0	--
SLIDE ROCK MOUNTAIN	7100	2/25/07	37	9.4	11.3	12.6
SOURDOUGH GUL SNOTEL	4000	3/01/07	1	.4	.4	--
SPENCER MDW SNOTEL	3400	3/01/07	108	38.1	36.2	28.6
SPIRIT LAKE SNOTEL	3100	3/01/07	---	7.1	5.6	6.2
SPOTTED BEAR MTN.	7000	2/24/07	34	9.0	11.0	12.7
SPRUCE SPGS SNOTEL	5700	3/01/07	44	12.6	17.9	--
STARVATION MOUNTAIN	6750	2/28/07	58	19.9	22.4	16.6
STAHL PEAK SNOTEL	6030	3/01/07	87	27.5	34.2	29.9
STAMPEDE PASS SNOTEL	3860	3/01/07	119	41.4	44.4	39.8
STEMILT SLIDE	5000	2/27/07	46	13.8	--	12.8
STEMPLE PASS	6600	2/26/07	29	6.8	8.2	8.3

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
STEVENS PASS SNOTEL	4070	3/01/07	119	36.7	42.4	38.3
STORM LAKE	7780	2/23/07	52	10.0	10.8	10.2
STRYKER BASIN	6180	2/27/07	76	25.8	35.5	26.9
SUMMERLAND RES CAN.	4200	3/01/07	36	10.7	8.8	8.4
SUMMIT G.S. #2	4600	2/27/07	41	10.1	11.0	8.1
SUNSET SNOTEL	5540	3/01/07	---	16.0	16.3	26.0
SURPRISE LKS SNOTEL	4250	3/01/07	146	46.9	62.6	40.1
SWAMP CREEK SNOTEL	4000	3/01/07	55	21.0	17.2	17.2
TEN MILE LOWER	6600	2/28/07	27	6.0	6.4	5.9
TEN MILE MIDDLE	6800	2/28/07	32	7.5	8.7	8.9
THUNDER BASIN SNOTEL	4200	3/01/07	83	35.3	30.0	29.7
THUNDER BASIN	4200	3/01/07	---	21.5e	--	19.0
THOMPSON CREEK	2500	2/28/07	21	4.2	3.0	--
THOMPSON RIDGE	4650	2/23/07	40	13.5	13.9	--
TINKHAM CREEK SNOTEL	3000	3/01/07	99	31.9	32.5	26.7
TOATS COULEE	2850	2/23/07	14	4.2	4.2	3.4
TOGO	3370	2/28/07	44	10.7	--	8.6
TOUCHET SNOTEL	5530	3/01/07	74	26.2	28.9	28.5
TRINKUS LAKE	6100	2/24/07	93	32.1	36.7	36.4
TROUGH #2 SNOTEL	5310	3/01/07	40	10.0	12.3	9.3
TROUT CREEK CAN.	5650	2/27/07	33	8.9	4.4	6.7
TRUMAN CREEK	4060	2/28/07	22	5.3	4.3	4.4
TUNNEL AVENUE	2450	3/02/07	62	22.8	23.0	18.6
TV MOUNTAIN	6800	3/02/07	52	14.4	17.6	15.0
TWELVEMILE SNOTEL	5600	3/01/07	49	13.7	19.2	16.0
TWIN CAMP	4100	2/28/07	59	20.0e	24.0	21.5
TWIN CREEKS	3580	2/24/07	26	7.5	9.7	10.2
TWIN LAKES SNOTEL	6400	3/01/07	98	33.0	42.5	34.7
TWIN SPIRIT DIVIDE	3480	2/25/07	43	12.4	--	13.1
UPPER HOLLAND LAKE	6200	2/24/07	77	23.2	27.4	30.0
UPPER WHEELER SNOTEL	4400	3/01/07	50	12.5	14.5	11.7
VASEUX CREEK CAN.	4250	3/02/07	23	5.3	3.5	5.5
VULCAN MTN	4660	2/27/07	42	12.0	14.3	--
VULCAN ROAD	3840	2/27/07	34	8.9	9.9	--
WARM SPRINGS SNOTEL	7800	3/01/07	71	18.1	17.6	17.0
WATERHOLE SNOTEL	5000	3/01/07	110	40.0	30.9	30.0
WEASEL DIVIDE	5450	2/28/07	82	27.2	32.2	28.7
WELLS CREEK SNOTEL	4200	3/01/07	100	37.8	32.8	28.4
WHITE PASS ES SNOTEL	4500	3/01/07	79	22.3	24.2	21.8
WHITE ROCKS MTN CAN.	7200	2/24/07	54	19.4	24.0	19.6

NRCS Natural Resources Conservation Service

March 1, 2007 - Snowpack, Precipitation and Reservoir Conditions at a Glance

(Water Year = October 1, 2006 - Current Date)



USDA NRCS
Natural Resources Conservation Service

Washington State
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Helpful Internet Addresses

NRCS Snow Survey and Climate Services Homepages

Washington:
http://www.wa.nrcs.usda.gov/snow

Oregon:
http://www.or.nrcs.usda.gov/snow

Idaho:
http://www.id.nrcs.usda.gov/snow

National Water and Climate Center (NWCC):
http://www.wcc.nrcs.usda.gov

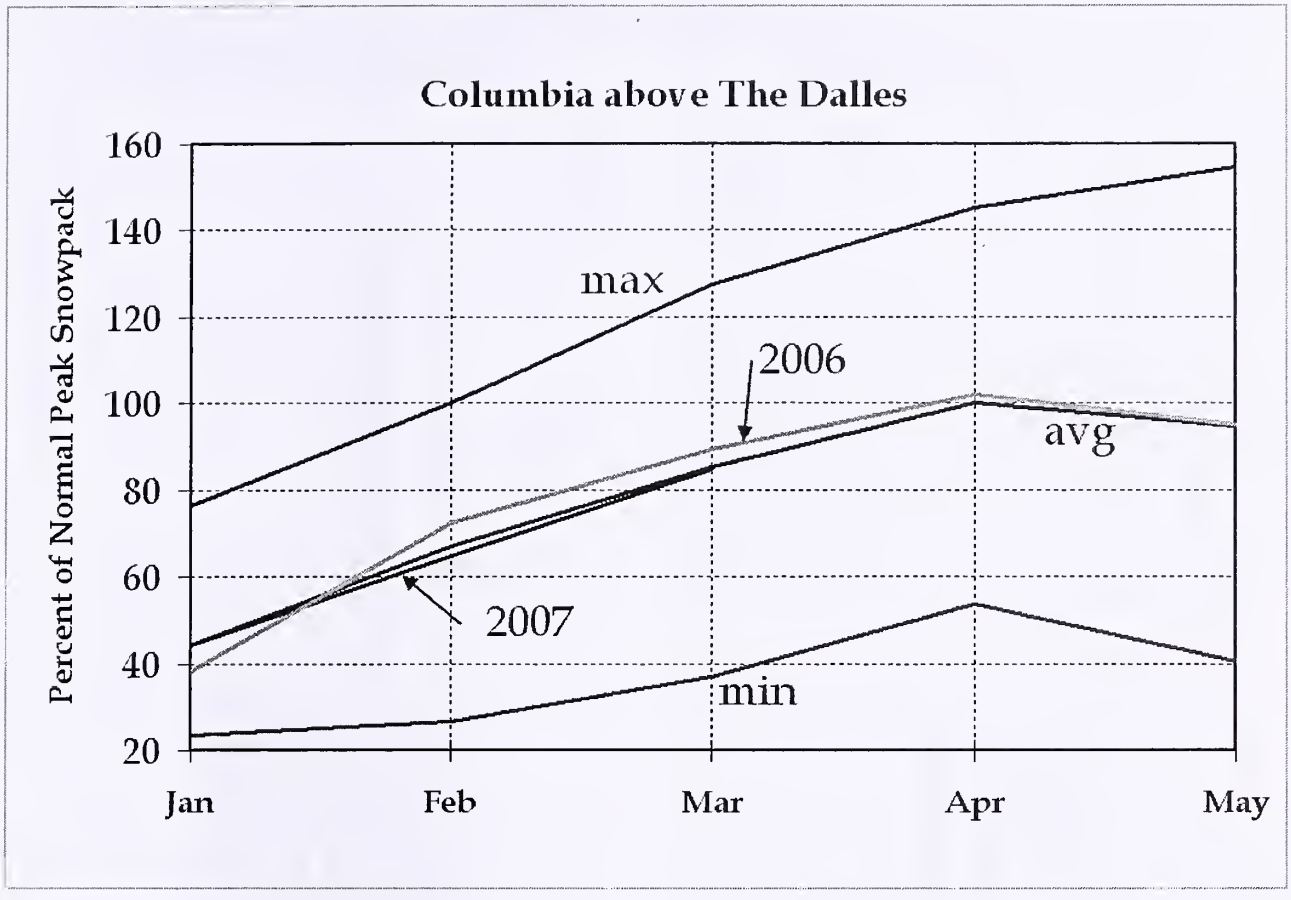
NWCC Anonymous FTP Server:
ftp.wcc.nrcs.usda.gov

USDA-NRCS Agency Homepages

Washington:
http://www.wa.nrcs.usda.gov

NRCS National:
http://www.nrcs.usda.gov

Columbia Basin Snowpack Summary



March 1, 2007

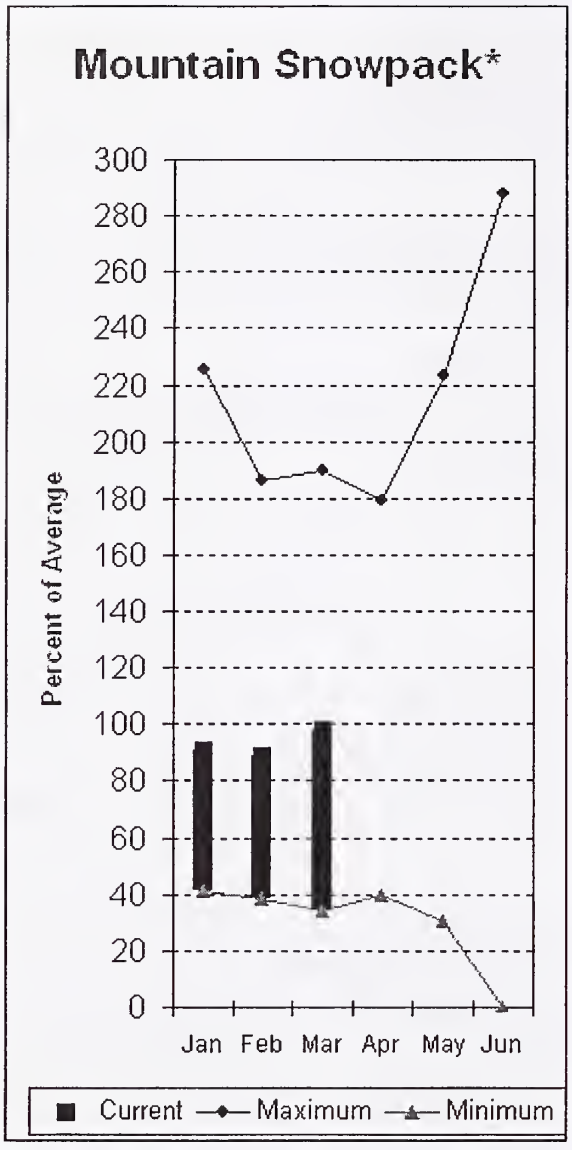
The Columbia Basin snowpack charts are produced, using only automated data. These data are telemetered via remote collection sites in Canada and the United States. The data are provisional, until they are officially released bythe responsible data collection agency.

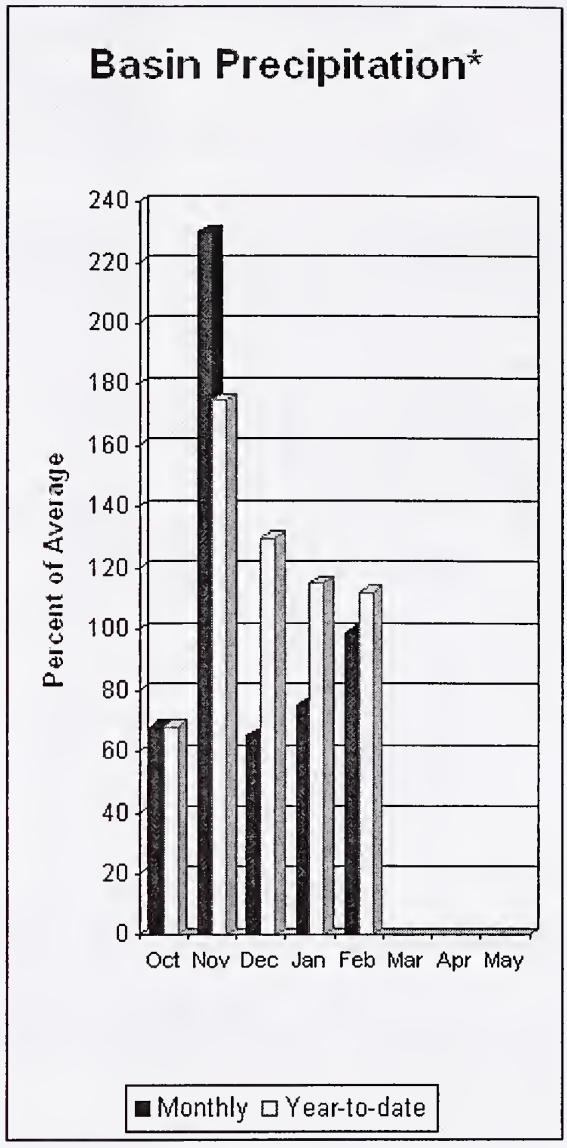
The Canadian snowpack is still "gold" this year at 117% of average. Our neighbor's snowpack to the north ranges between 100% at Park Mountain, to 160% at Cook Creek. The snow packs that gained the most from last month were: Upper Snake - 9%, Salmon - 7%, Boise and southern Idaho - 6%, Pend Oreille - 5%, Clearwater - 5%, Deschutes - 4%, and eastern Oregon - 3%. The northern Cascade and Yakima snow packs lost 6% and 4%, respectively. However, those snow packs are still above average.

Overall, the Columbia Basin snowpack increased from 97% of average to 99% of average. This compares to 105% last year. The snowpack is at 85% of the average peak accumulation. This compares to 89% last year. The snowpack above Castlegar is still at 111% of average, compared to 98% last year. The snowpack above Grand Coulee is at 105% of average, compared to 100% last year and 103% on February 1. The snowpack above Ice Harbor is at 82% of average, compared to 113% last year and 76% on February 1.

The Columbia Basin generally received above average precipitation during February. This should increase the runoff potential of the Columbia River at The Dalles from the last official forecast published on February 1. It just goes to show that the climate can make wide swings from month to month; from dry to wet and wet to dry. We should probably expect more surprises as the water year progresses.

Spokane River Basin





*Based on selected stations

The March 1 forecasts for summer runoff within the Spokane River Basin are 96% of average near Post Falls and 96% at Long Lake. The Chamokane River near Long Lake forecasted to have 101% of average flows for the May-August period. The forecast is based on a basin snowpack that is 98% of average and precipitation that is 112% of average for the water year. Precipitation for February was at 99% of average. Streamflow on the Spokane River at Long Lake was 82% of average for February. March 1 storage in Coeur d'Alene Lake was 128,000acre feet, 88% of average and 53% of capacity. Snowpack at Quartz Peak SNOTEL site was 105% of average with 20.4inches of water content. Average temperatures in the Spokane basin were slightly above for February and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

SPOKANE RIVER BASIN
Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SPOKANE near Post Falls (2)	APR-SEP	1950	2300	2530	96	2760	3110	2650
	APR-JUL	1880	2210	2440	96	2670	3000	2550
SPOKANE at Long Lake (2)	APR-JUL	2080	2470	2730	96	2990	3380	2850
	APR-SEP	2250	2660	2940	96	3220	3630	3070
CHAMOKANE CREEK near Long Lake	MAY-AUG	5.9	8.4	10.3	101	12.4	15.9	10.2

SPOKANE RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COEUR D'ALENE	238.5	127.5	83.3	144.9

SPOKANE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2007

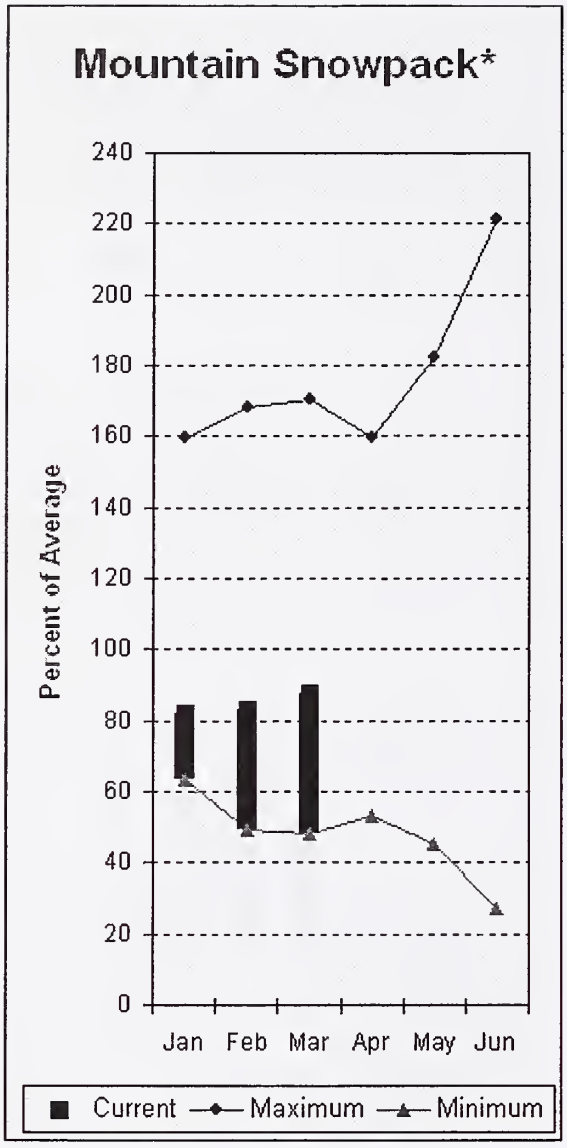
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SPOKANE RIVER	19	98	98
NEWMAN LAKE	2	104	106

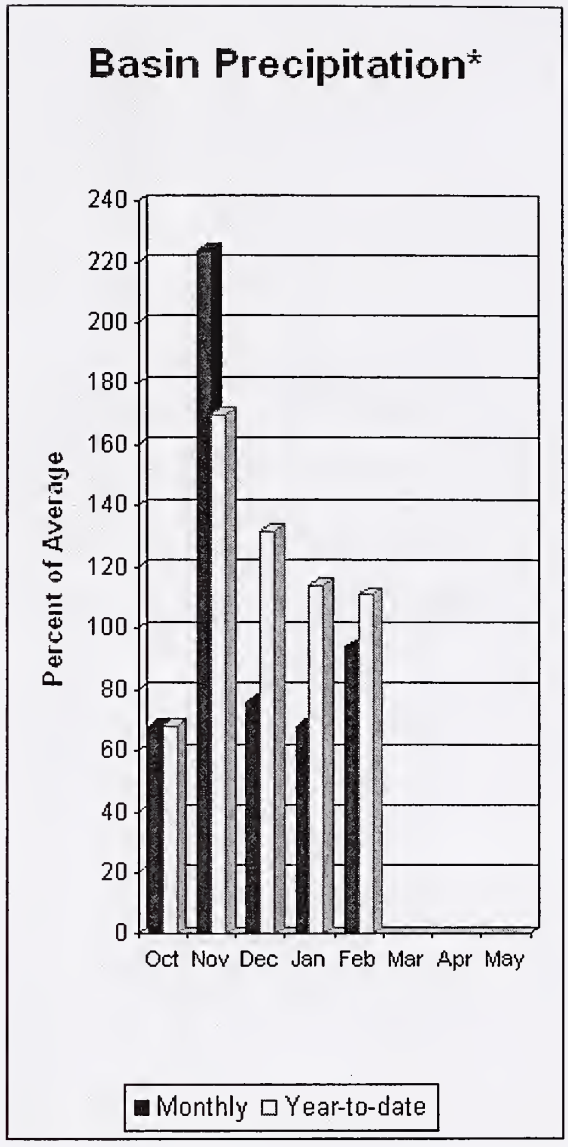
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Colville - Pend Oreille River Basins





*Based on selected stations

The April – September average forecast for the Kettle River streamflow is 98%, Colville at Kettle Falls is 103% and Priest River near the town of Priest River is 99%. February streamflow was 80% of average on the Pend Oreille River, 84% on the Columbia at the International Boundary and 68% on the Kettle River. March 1 snow cover was 88% of average in the Pend Oreille Basin River Basin and 104% in the Kettle River Basin. Bunchgrass Meadows SNOTEL site had 20.7 inches of snow water on the snow pillow. Normally Bunchgrass would have 24.4 inches on March 1. Precipitation during February was 94% of average, bringing the year-to-date precipitation to 111% of average. Reservoir storage in the basin, including Lake Pend Oreille and Priest Lake was 43% of normal. Average temperatures were slightly above normal for February and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
PEND OREILLE Lake Inflow (2)	APR-JUL	9830	11200	12200	96	13200	14600	12700
	APR-SEP	10700	12200	13300	96	14400	15900	13900
PRIEST near Priest River (1,2)	APR-JUL	665	750	810	99	875	970	815
	APR-SEP	710	800	865	99	930	1040	870
PEND OREILLE bl Box Canyon (2)	APR-JUL	10300	11600	12400	96	13200	14500	12900
	APR-SEP	10900	12400	13500	96	14600	16100	14100
COLVILLE at Kettle Falls	APR-SEP	89	121	145	103	171	215	141
	APR-JUL	82	111	132	103	155	194	128
KETTLE near Laurier	APR-SEP	1590	1790	1920	98	2050	2250	1970
	APR-JUL	1520	1700	1830	98	1960	2140	1870
COLUMBIA at Birchbank (1,2)	APR-JUL	30900	34300	35900	103	37500	40900	34900
	APR-SEP	38500	42800	44800	103	46800	51100	43500
COLUMBIA at Grand Coulee Dm (1,2)	APR-SEP	54600	61700	64900	101	68100	75200	64000
	APR-JUL	46200	52100	54800	102	57500	63400	53800

COLVILLE - PEND OREILLE RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ROOSEVELT		NO REPORT		
PEND OREILLE	1561.3	658.6	844.8	778.8
PRIEST LAKE	119.3	56.9	50.4	56.8

COLVILLE - PEND OREILLE RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

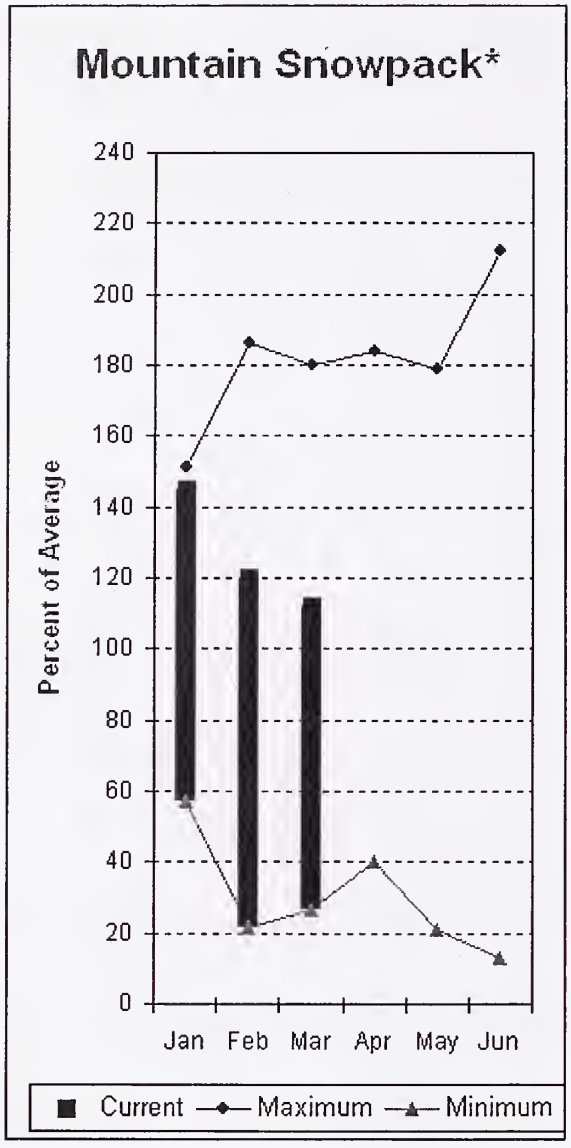
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
COLVILLE RIVER	0	80	0
PEND OREILLE RIVER	11	84	85
KETTLE RIVER	7	94	104

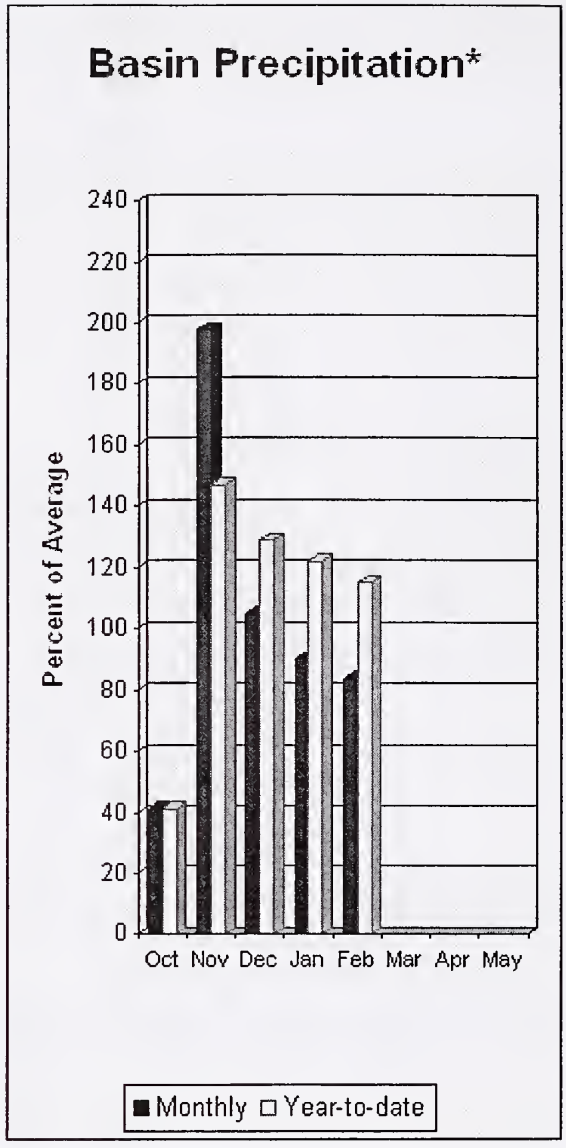
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Okanogan - Methow River Basins





*Based on selected stations

Summer runoff average forecast for the Okanogan River is 111%, Similkameen River is 117%, Methow River is 109% and Salmon Creek is 112%. March 1 snow cover on the Okanogan was 106% of average, Omak Creek was 101% and the Methow was 108%. February precipitation in the Okanogan-Methow was 84% of average, with precipitation for the water year at 115% of average. February streamflow for the Methow River was 138% of average, 102% for the Okanogan River and 137% for the Similkameen. Snow-water content at Salmon Meadows SNOTEL was 10.9 inches. Average for this site is 10.1 inches on March 1. Combined storage in the Conconully Reservoirs was 17,000-acre feet, which is 73% of capacity and 101% of the March 1 average. Temperatures were slightly above normal for February and slightly below average for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SIMILKAMEEN near Nighthawk (1)	APR-JUL	1270	1460	1580	117	1700	1890	1350
	APR-SEP	1380	1570	1700	117	1830	2020	1450
OKANOGAN near Tonasket (1)	APR-JUL	1190	1520	1750	111	1980	2310	1580
	APR-SEP	1340	1710	1960	111	2210	2580	1770
OKANOGAN at Malott (1)	APR-JUL	1180	1610	1810	111	2010	2440	1635
	APR-SEP	1390	1820	2020	111	2220	2650	1826
Salmon Creek nr Conconully	APR-JUL	11.1	16.6	21	112	26	34	18.7
	APR-SEP	11.4	17.3	22	112	27	36	19.7
TOATS COULEE CREEK nr Loomis	APR-JUL	21	28	33	118	38	45	28
	APR-SEP	23	30	35	117	40	47	30
Beaver Creek blw SF nr Twisp	APR-SEP	9.0	11.9	13.8	114	15.7	18.6	12.1
	APR-JUL	8.1	10.9	12.8	115	14.7	17.5	11.1
METHOW RIVER near Pateros	APR-SEP	850	975	1070	109	1170	1320	985
	APR-JUL	780	900	990	109	1080	1230	910

OKANOGAN - METHOW RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SALMON LAKE	10.5	9.5	7.5	8.4
CONCONULLY RESERVOIR	13.0	7.7	4.5	8.7

OKANOGAN - METHOW RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

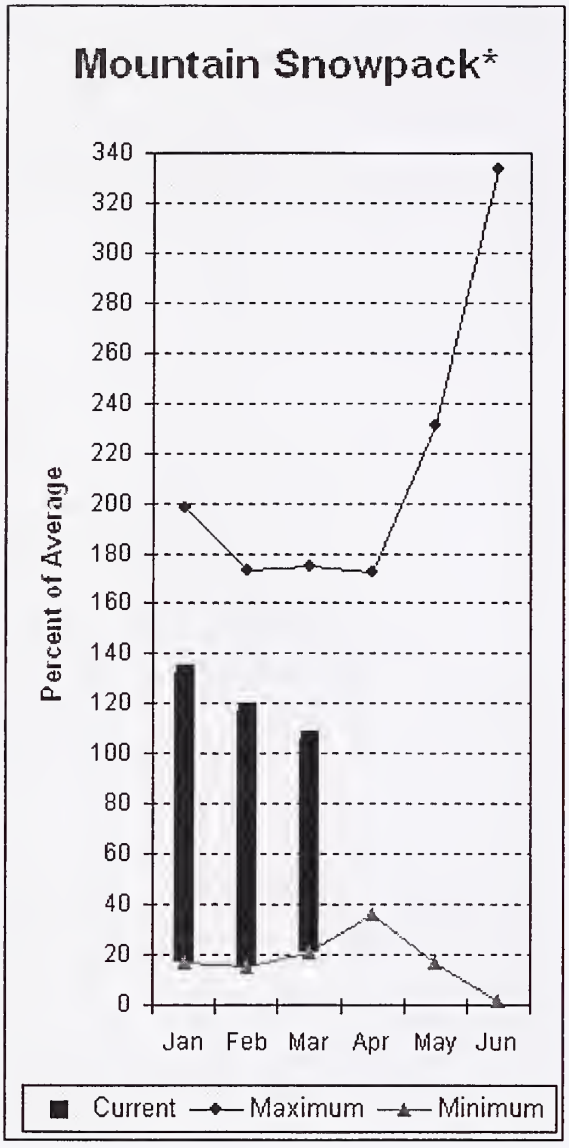
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
OKANOGAN RIVER	22	101	106
OMAK CREEK	2	85	101
SANPOIL RIVER	1	91	76
SIMILKAMEEN RIVER	5	136	114
TOATS COULEE CREEK	1	86	124
CONCONULLY LAKE	3	89	120
METHOW RIVER	8	96	108

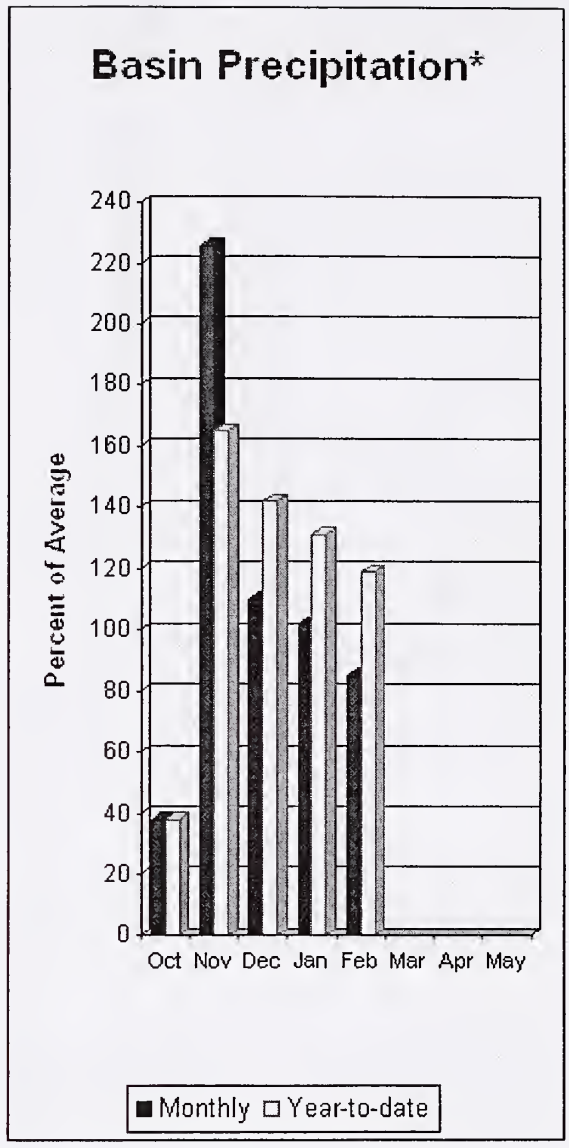
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Wenatchee - Chelan River Basins





*Based on selected stations

Precipitation during February was 77% of average in the basin and 119% for the year-to-date. Runoff for Entiat River is forecast to be 110% of average for the summer. The March-September average forecast for Chelan River is 113%, Wenatchee River at Plain is 113% and Stehekin is 113%. Icicle, Stemilt and Squilchuck creeks are all forecasted to have above average flows as well. February average streamflows on the Chelan River were 111% and on the Wenatchee River 94%. March 1 snowpack in the Wenatchee River Basin was 105% of average; the Chelan, 95%; the Entiat, 106%; Stemilt Creek, 114% and Colockum Creek, 108%. Reservoir storage in Lake Chelan was 343,000-acre feet, 137% of March 1 average and 51% of capacity. Lyman Lake SNOTEL had the most snow water with 58.2 inches of water. This site would normally have 55.1 inches on March 1. Temperatures were slightly above normal for February and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
CHELAN RIVER near Chelan	APR-SEP	1200	1280	1340	113	1400	1490	1190
	APR-JUL	1050	1120	1180	112	1240	1320	1050
STEHEKIN near STEHEKIN	APR-SEP	835	895	940	113	985	1050	830
	APR-JUL	700	755	795	114	835	900	700
ENTIAT RIVER nr Ardenvoir	APR-SEP	215	245	265	110	285	320	240
	APR-JUL	194	220	240	112	260	290	215
WENATCHEE at Plain	APR-SEP	1160	1270	1350	113	1430	1560	1200
	APR-JUL	1040	1140	1210	112	1280	1390	1080
WENATCHEE R. at Peshastin	APR-SEP	1580	1730	1840	112	1950	2120	1640
	APR-JUL	1440	1570	1660	112	1760	1900	1480
STEMILT CK nr Wenatchee (miner's in)	MAY-SEP	113	140	158	115	176	205	138
ICICLE CREEK near Leavenworth	APR-SEP	330	365	390	113	415	455	345
	APR-JUL	305	335	360	113	385	420	320
COLUMBIA R. bl Rock Island Dam (2)	APR-SEP	63200	68600	72300	104	76000	81400	69500
	APR-JUL	51900	57700	61600	104	65500	71300	59000

WENATCHEE - CHELAN RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CHELAN LAKE	676.1	343.1	226.9	250.1

WENATCHEE - CHELAN RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

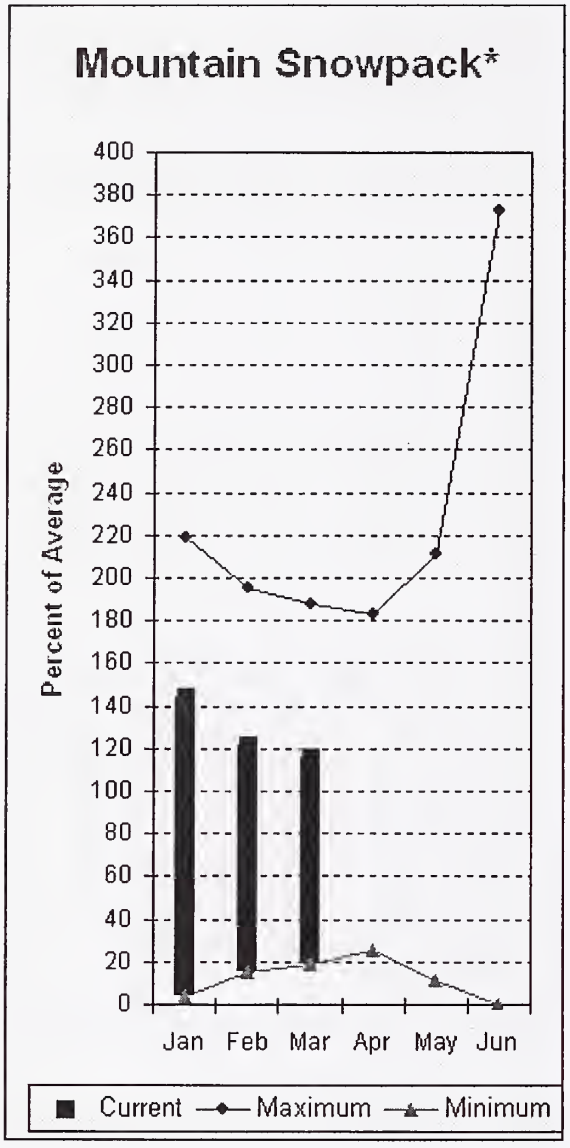
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CHELAN LAKE BASIN	7	103	95
ENTIAT RIVER	1	99	106
WENATCHEE RIVER	10	95	105
STEMILT CREEK	3	94	114
COLOCKUM CREEK	1	81	108

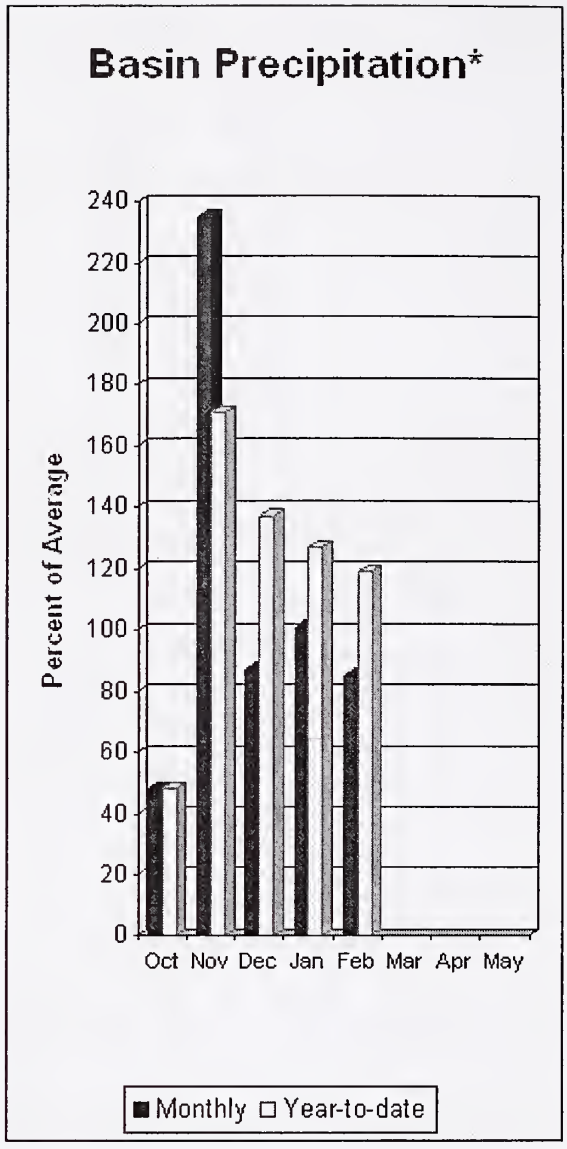
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper Yakima River Basin





*Based on selected stations

March 1 reservoir storage for the Upper Yakima reservoirs was 524,000-acre feet, 105% of average. Forecasts for the Yakima River at Cle Elum are 113% of average and the Teanaway River near Cle Elum is at 114%. Lake inflows are all forecasted to be near that same range this summer. February streamflows within the basin were Yakima near Cle Elum at 98% and Cle Elum River near Roslyn at 96%. March 1 snowpack was 116% based upon 9 snow course and SNOTEL readings within the Upper Yakima Basin. Precipitation was 85% of average for February and 119% year-to-date for water. Volume forecasts for the Yakima Basin are for natural flow. As such, they may differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
KEECHELUS LAKE INFLOW	APR-JUL	116	128	137	113	146	159	121
	APR-SEP	128	141	150	113	159	173	133
KACHESS LAKE INFLOW	APR-JUL	107	117	125	113	133	145	111
	APR-SEP	115	127	135	113	143	156	120
CLE ELUM LAKE INFLOW	APR-JUL	390	435	465	113	500	550	410
	APR-SEP	420	475	510	113	550	610	450
YAKIMA at Cle Elum	APR-JUL	785	870	930	113	990	1090	820
	APR-SEP	855	950	1020	113	1090	1200	900
TEANAWAY near Cle Elum	APR-JUL	118	143	162	113	182	215	143
	APR-SEP	121	147	166	114	186	220	146

UPPER YAKIMA RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
KEECHELUS	157.8	94.7	66.2	102.4
KACHESS	239.0	161.5	85.1	154.7
CLE ELUM	436.9	268.0	117.0	241.4

UPPER YAKIMA RIVER BASIN
Watershed Snowpack Analysis - March 1, 2007

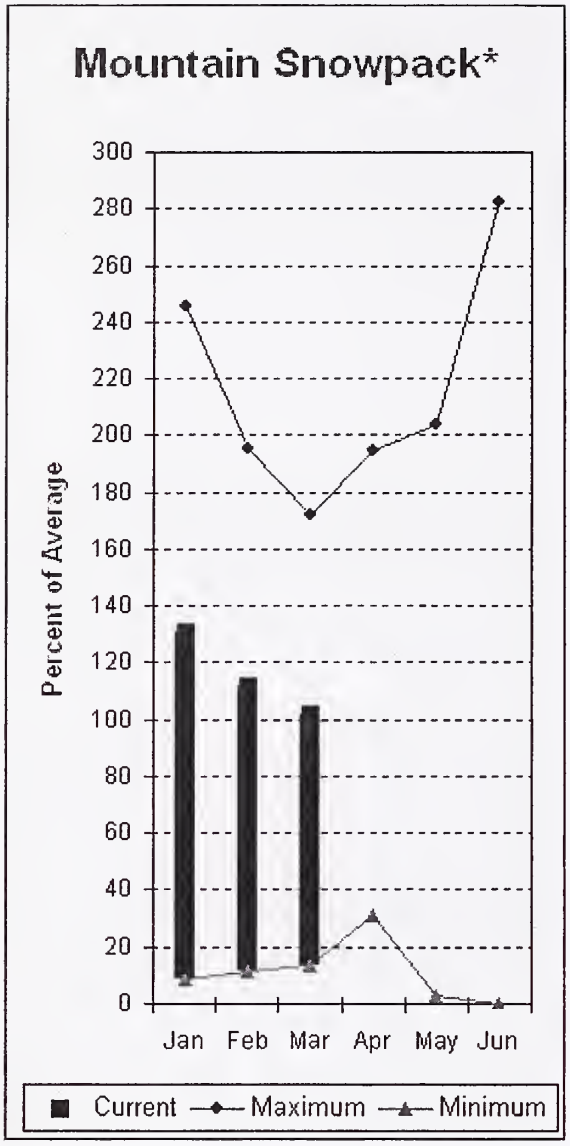
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER YAKIMA RIVER	9	97	116

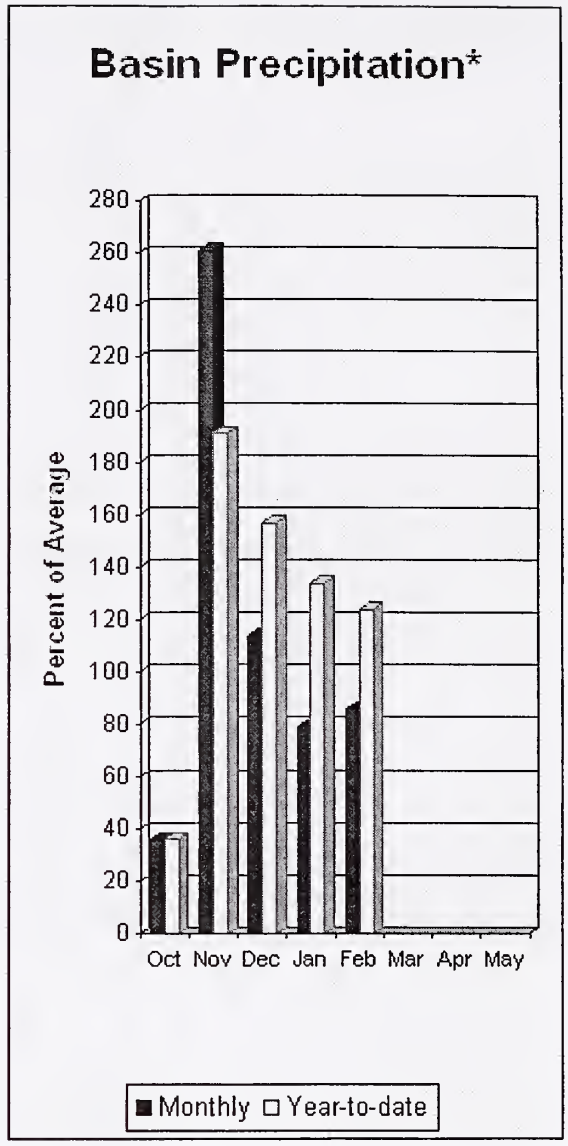
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Lower Yakima River Basin





*Based on selected stations

February average streamflows within the basin were: Yakima River near Parker, 102% and the Naches River near Naches, 112%. March 1 reservoir storage for Bumping and Rimrock reservoirs was 180,000-acre feet, 131% of average. Forecast average flows for Yakima River near Parker are 111%; American River near Nile, 110%; Ahtanum Creek, 109%; and Klickitat River near Glenwood, 89%. March 1 snowpack was 102% based upon 9 snow course and SNOTEL readings within the Lower Yakima Basin and Ahtanum Creek reported in at 102%of average. Precipitation was 86% of average for February and 124% year-to-date for water. Temperatures were slightly above normal for February and near average for the water year. Volume forecasts for Yakima Basin are for natural flow. As such, they March differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BUMPING LAKE INFLOW	APR-SEP	129	141	150	114	159	173	132
	APR-JUL	120	131	139	114	147	160	122
AMERICAN RIVER near Nile	APR-SEP	113	123	130	110	137	149	118
	APR-JUL	103	112	119	110	126	136	108
RIMROCK LAKE INFLOW	APR-SEP	230	250	265	110	280	300	240
	APR-JUL	199	215	225	110	235	255	205
NACHES near Naches	APR-SEP	800	865	910	109	955	1030	835
	APR-JUL	725	785	825	109	865	930	760
AHTANUM CREEK at Union Gap	APR-SEP	21	29	35	109	41	49	32
	APR-JUL	20	28	33	110	38	46	30
YAKIMA near Parker	APR-SEP	1860	2020	2130	111	2240	2400	1920
	APR-JUL	1690	1830	1920	111	2010	2150	1730
KLICKITAT near Glenwood	APR-JUN	95	108	116	90	124	137	129
	APR-SEP	116	133	145	89	157	174	163

LOWER YAKIMA RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BUMPING LAKE	33.7	14.8	22.6	11.5
RIMROCK	198.0	165.3	118.2	126.1

LOWER YAKIMA RIVER BASIN
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of: Last Yr	Average

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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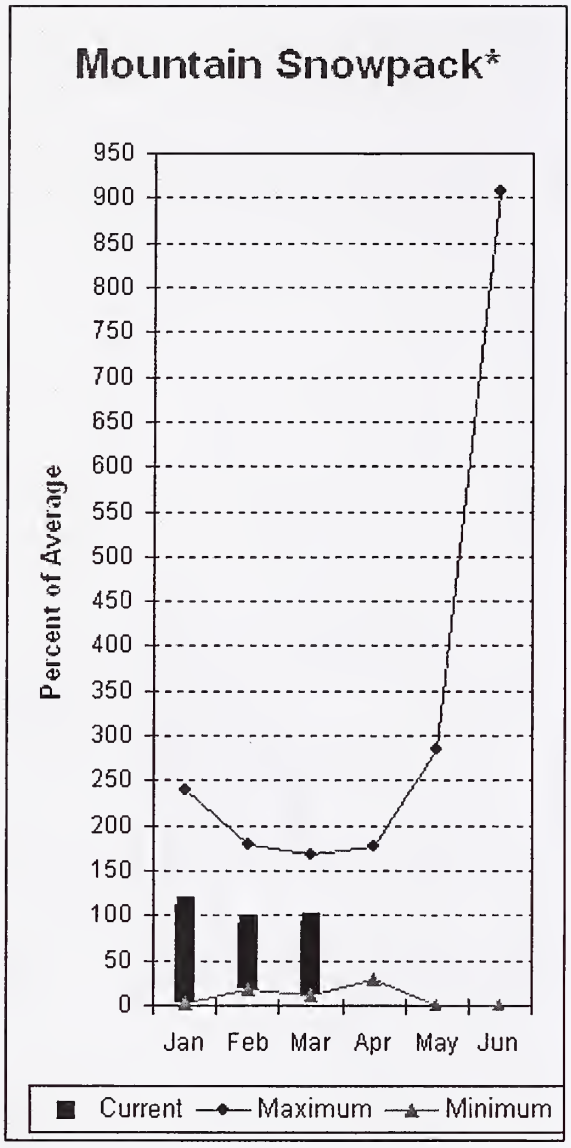
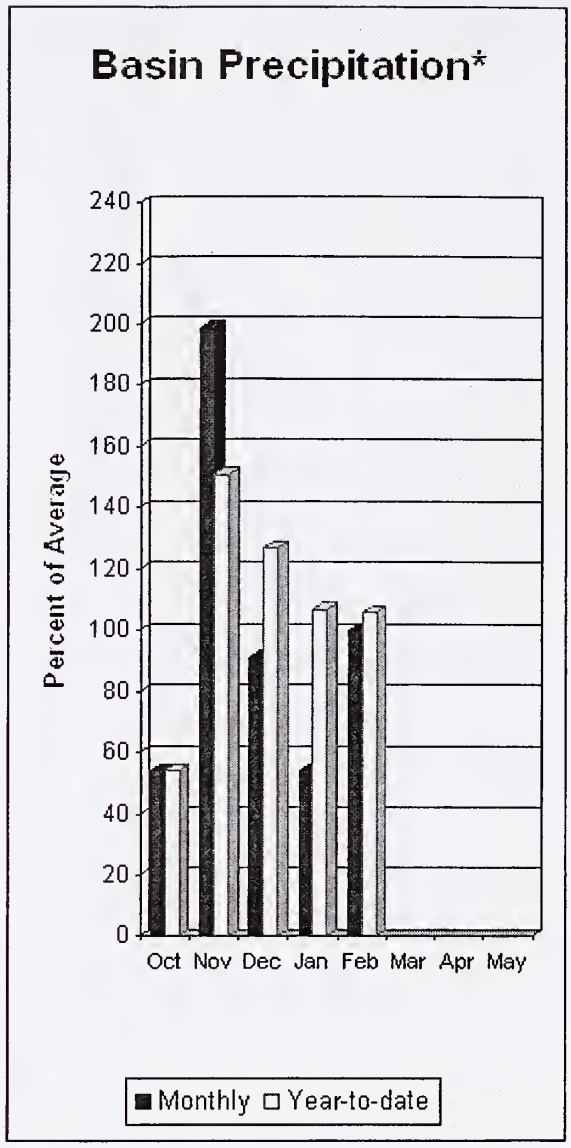
Walla Walla River Basin





*Based on selected stations

February precipitation was 100% of average, maintaining the year-to-date precipitation at 106% of average. Snowpack in the basin was 95% of average. Streamflow forecasts are 100% of average for Mill Creek at Kooskooskie and 100% for the SF Walla Walla near Milton-Freewater. February streamflow was 153% of average for the Walla Walla River. Average temperatures were near normal for February and for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SF WALLA WALLA near Milton-Freewater	APR-JUL	43	50	54	100	59	66	54
	APR-SEP	55	62	67	100	72	80	67
MILL CREEK at Kooskooskie	APR-JUL	18.0	22	25	104	28	33	24
	APR-SEP	21	25	28	100	31	37	28

WALLA WALLA RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

WALLA WALLA RIVER BASIN
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WALLA WALLA RIVER	2	89	95

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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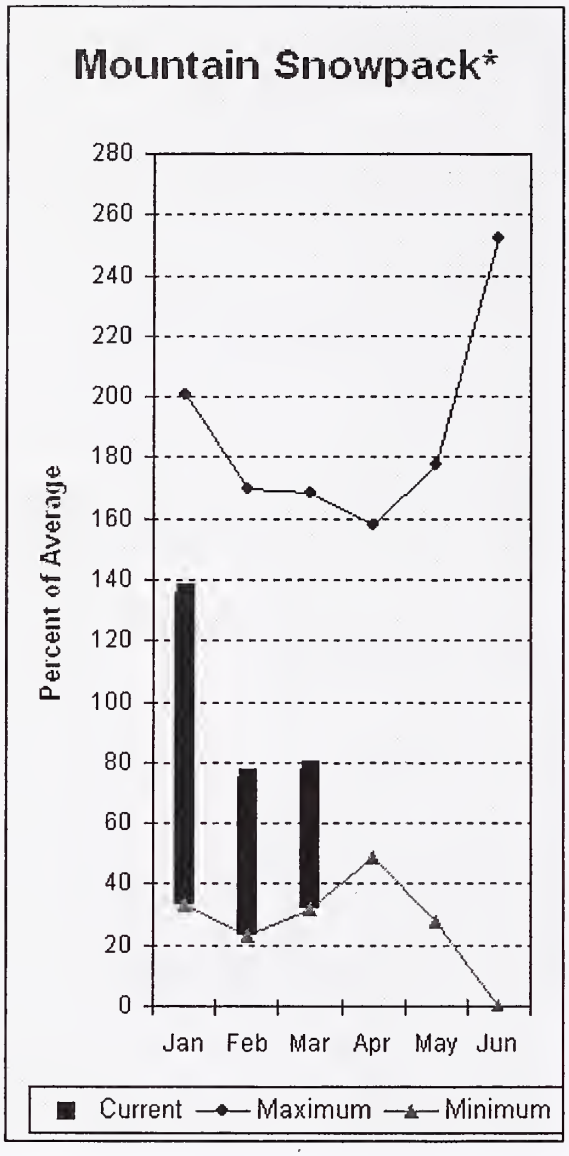
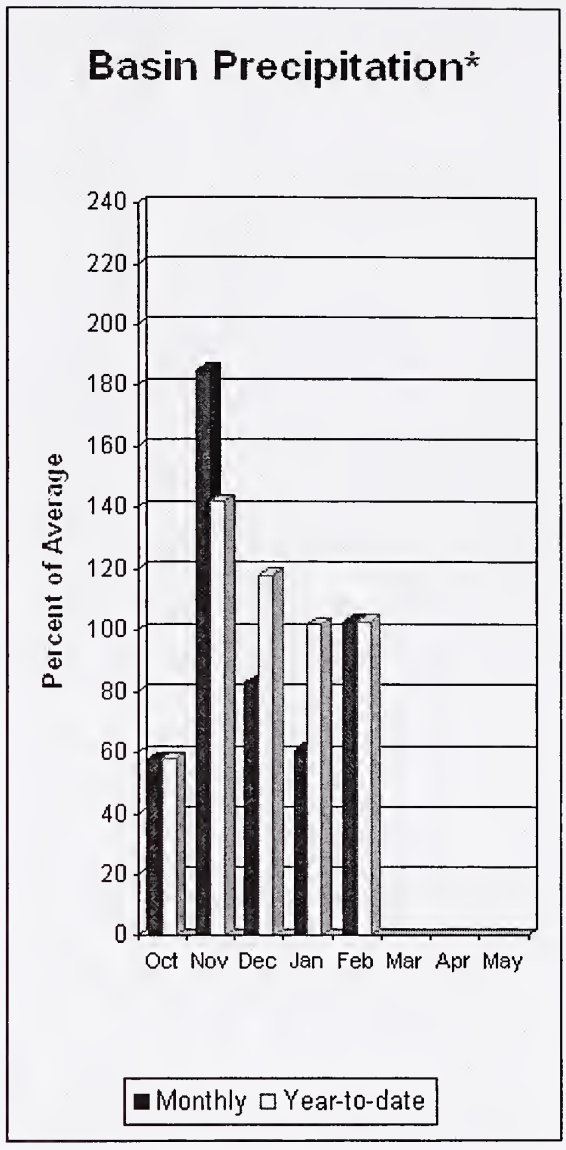
Lower Snake River Basin





*Based on selected stations

The April - September forecast is for 95% for Clearwater River at Spalding. The Snake and Grande Ronde rivers can expect summer flows to be about 80% and 83% of normal respectively. February precipitation was 103% of average, bringing the year-to-date precipitation to 103% of average. March 1 snowpack readings averaged 78% of normal. February streamflow was 72% of average for Snake River below Lower Granite Dam and 88% for Grande Ronde River near Troy. Average temperatures were near normal for February and for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GRANDE RONDE at Troy (1)	MAR-JUL	1040	1200	1310	83	1430	1610	1580
	APR-SEP	850	1020	1140	83	1270	1470	1370
CLEARWATER at Spalding (1,2)	APR-JUL	4670	6320	7070	95	7820	9470	7430
	APR-SEP	5050	6700	7450	95	8200	9850	7850
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	10030	15000	17300	80	19600	24600	21600
	APR-SEP	11100	16700	19300	80	21900	27500	24100

LOWER SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DWORSHAK	3468.0	2482.5	2302.8	2247.3

LOWER SNAKE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
LOWER SNAKE, GRANDE RONDE	16	92	78

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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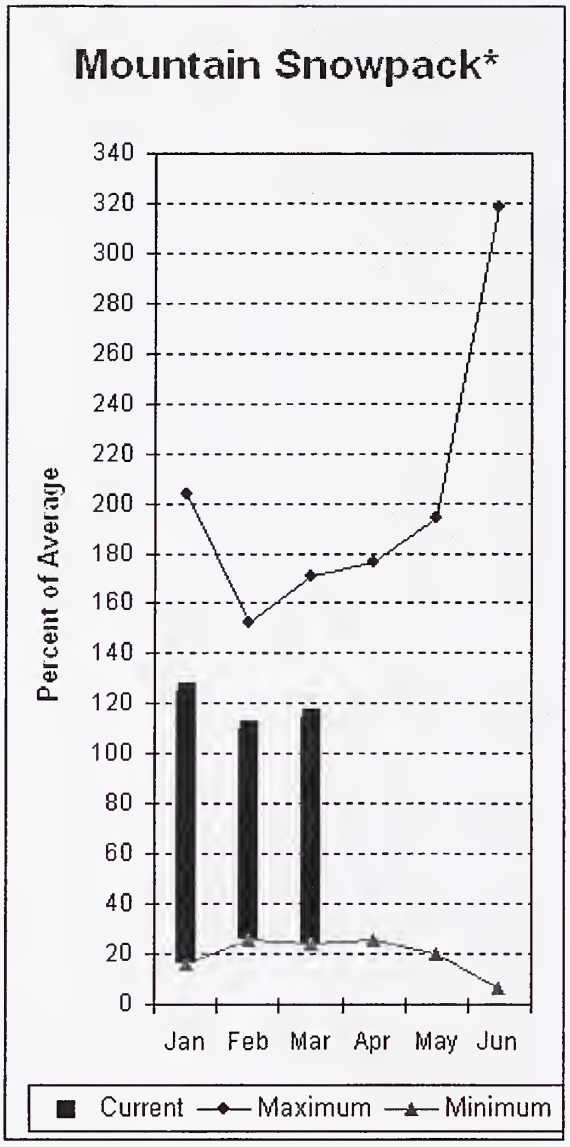
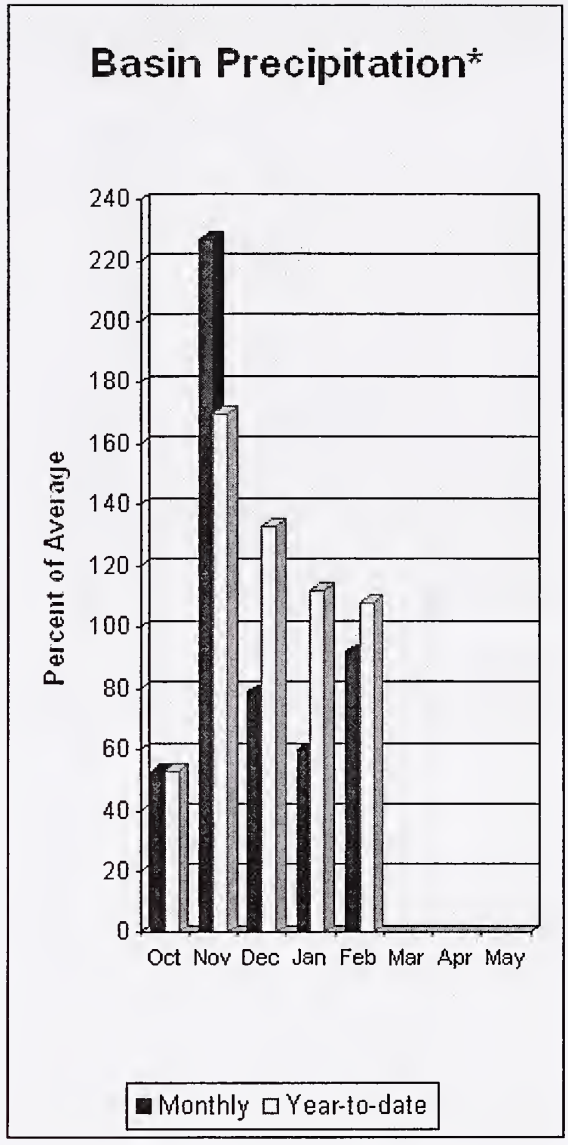
Cowlitz - Lewis River Basins





*Based on selected stations

Forecasts for April – September streamflows within the basin are Lewis River at Ariel, 105% and Cowlitz River at Castle Rock, 102% of average. The Columbia at The Dalles is forecasted to have 95% of average flows this summer. February average streamflow for Cowlitz River was 86% and 78% for Lewis River. The Columbia River at The Dalles was 79% of average. February precipitation was 92% of average and the water-year average was 108%. March 1 snow cover for Cowlitz River was 107%, and Lewis River was 124% of average. Average temperatures were slightly above normal during February and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LEWIS at Ariel (2)	APR-JUL	816	985	1100	107	1215	1384	1031
	APR-SEP	949	1122	1240	105	1358	1531	1176
COWLITZ R. bl Mayfield Dam (2)	APR-SEP	1040	1612	2000	104	2388	2960	1922
	APR-JUL	804	1373	1760	104	2147	2716	1689
COWLITZ R. at Castle Rock (2)	APR-SEP	1332	2135	2680	102	3225	4028	2639
	APR-JUL	1516	2001	2330	102	2659	3144	2295
KLICKITAT near Glenwood	APR-JUN	95	108	116	90	124	137	129
	APR-SEP	116	133	145	89	157	174	163
COLUMBIA R. at The Dalles (2)	APR-SEP	80000	88100	93600	95	99100	107000	98600
	APR-JUL	64900	74200	80500	95	86800	96100	84600

COWLITZ - LEWIS RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MOSSYROCK	0.0	1249.8	1233.4	---
SWIFT	0.0	659.1	618.6	---
YALE	0.0	337.6	305.8	---
MERWIN	0.0	394.7	403.4	---

COWLITZ - LEWIS RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LEWIS RIVER	5	86	124
COWLITZ RIVER	7	98	107

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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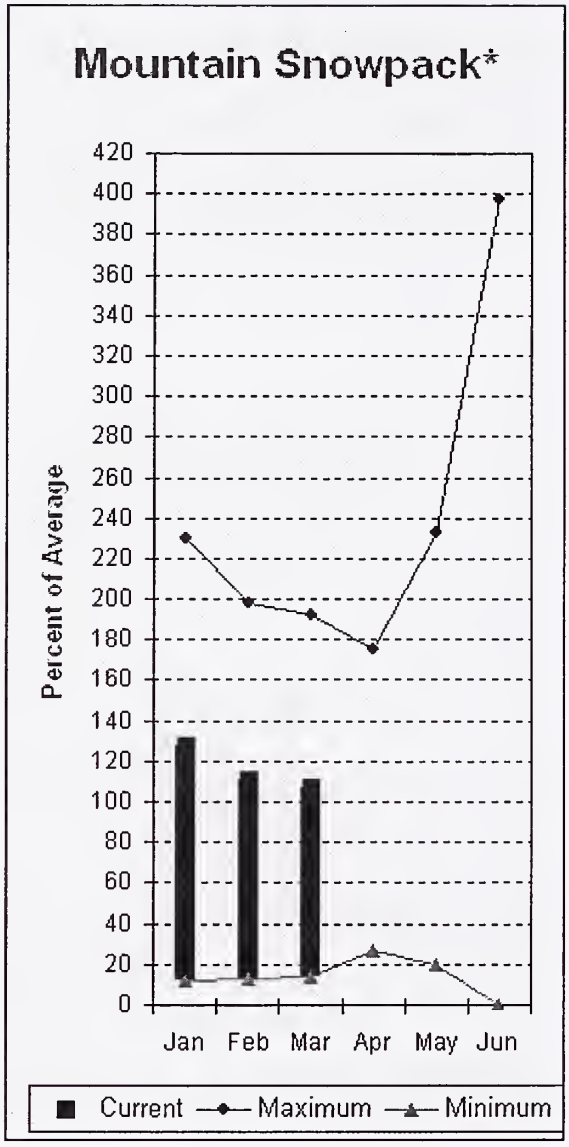
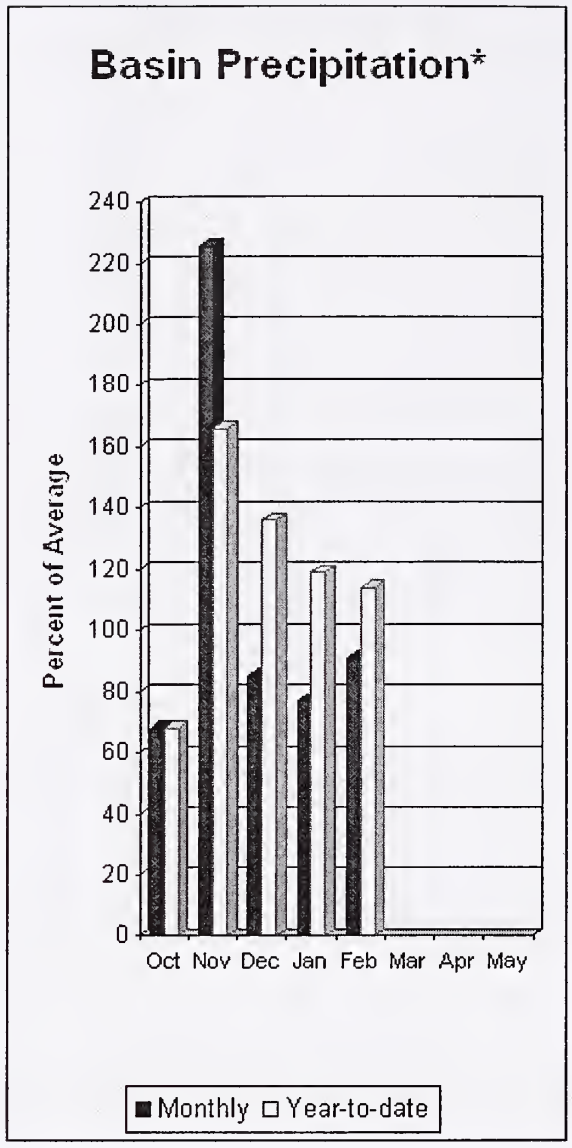
White - Green River Basins





*Based on selected stations

Summer runoff is forecast to be 112% of normal for the Green River below Howard Hanson Dam and 101% for the White River near Buckley. March 1 snowpack was 97% of average in the White River, 109% in the Puyallup River and 114% in Green River. Water content on March 1 at Corral Pass SNOTEL, at an elevation of 6,000 feet, was 30.6 inches. This site has a March 1 average of 29.5 inches. February precipitation was 91% of average, bringing the water year-to-date to 114% of average for the basins. Average temperatures in the area were slightly above normal for February and for the water-year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WHITE near Buckley (1,2)	APR-JUL	358	421	450	102	479	542	440
	APR-SEP	430	506	540	101	574	650	534
GREEN R below Howard Hansen (1,2)	APR-JUL	190	242	265	109	288	340	243
	APR-SEP	225	277	300	112	323	375	268

WHITE - GREEN - PUYALLUP RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

WHITE - GREEN - PUYALLUP RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WHITE RIVER	3	84	97
GREEN RIVER	7	100	114
PUYALLUP RIVER	3	89	109

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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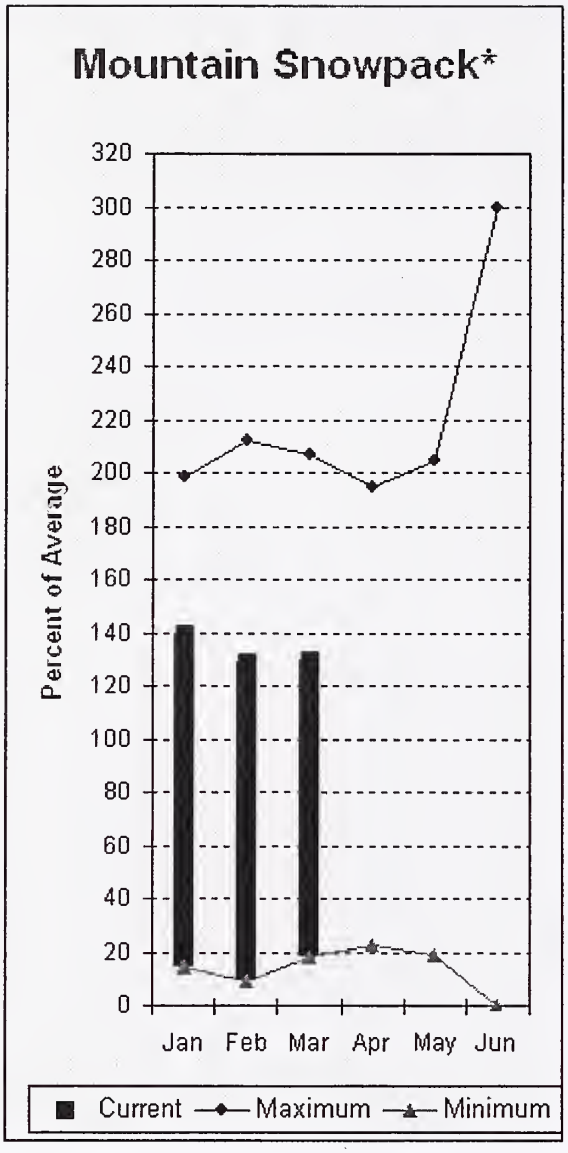
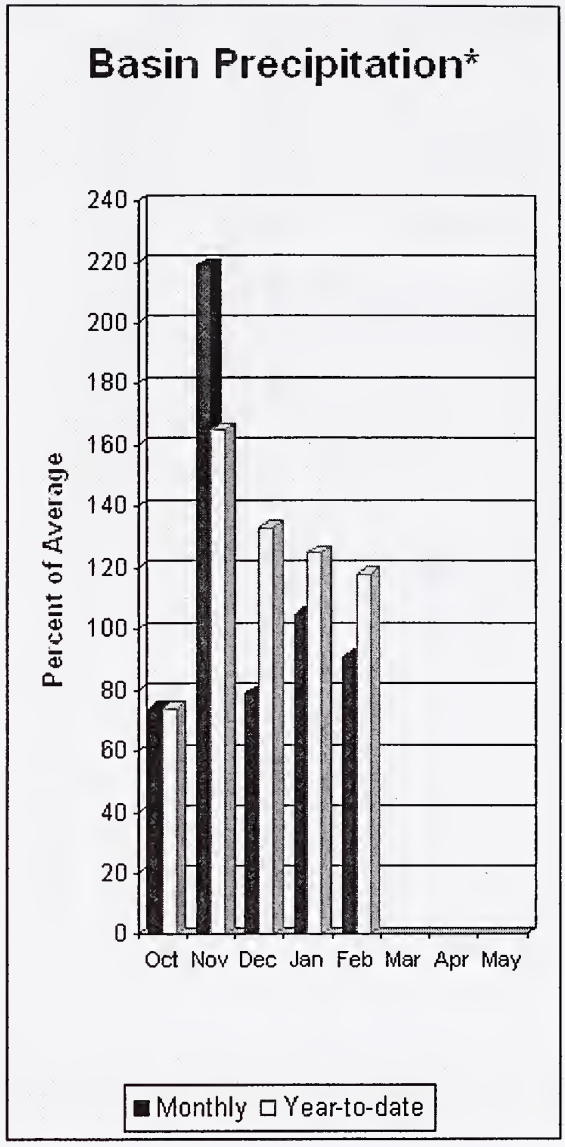
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Central Puget Sound River Basins





*Based on selected stations

Forecast for spring and summer flows are: 110% for Cedar River near Cedar Falls; 111% for Rex River; 112% for South Fork of the Tolt River; and 121% for Cedar River at Cedar Falls. Basin-wide precipitation for February was 91% of average, bringing water-year-to-date to 118% of average. March 1 average snow cover in Cedar River Basin was 142%, Tolt River Basin was 138%, Snoqualmie River Basin was 124%, and Skykomish River Basin was 117%. Olallie Meadows SNOTEL site, at 3960 feet, had 57.1 inches of water content. Average March 1 water content is 48.9 inches at Olallie Meadows. Temperatures were slightly above average for February and for the water-year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
CEDAR near Cedar Falls	APR-JUL	62	73	80	110	87	98	73
	APR-SEP	69	80	88	110	96	107	80
REX near Cedar Falls	APR-JUL	19.9	25	28	112	31	36	25
	APR-SEP	22	27	31	111	35	40	28
CEDAR RIVER at Cedar Falls	APR-JUL	66	79	88	119	97	110	74
	APR-SEP	66	79	88	121	97	110	73
SOUTH FORK TOLT near Index	APR-JUL	13.4	15.0	16.0	109	17.0	18.6	14.7
	APR-SEP	15.7	17.7	19.0	112	20	22	16.9

CENTRAL PUGET SOUND RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

CENTRAL PUGET SOUND RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

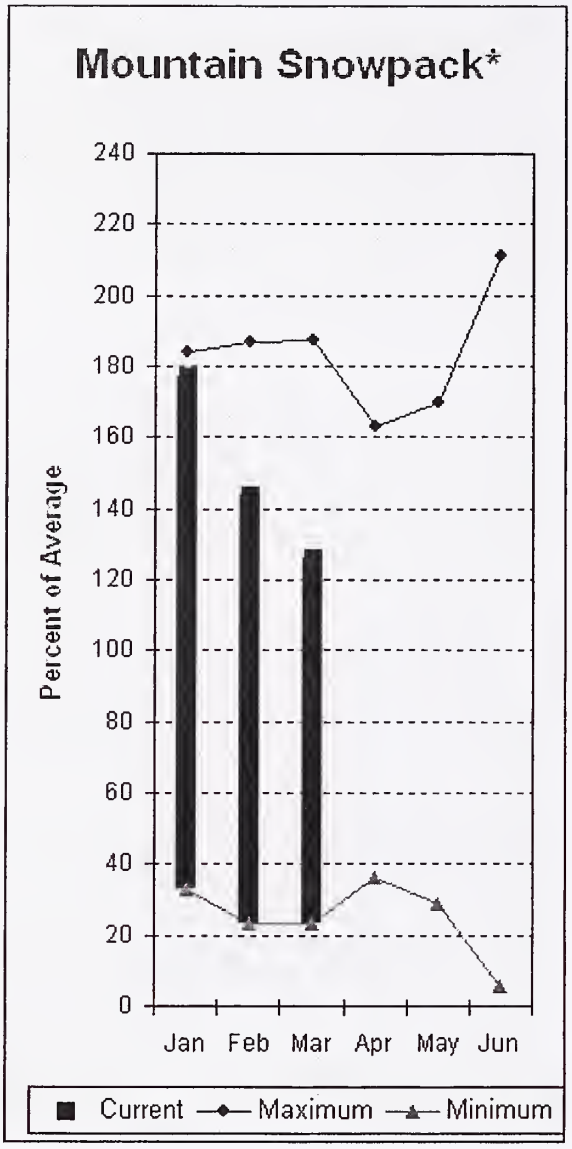
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CEDAR RIVER	6	96	142
TOLT RIVER	3	99	138
SNOQUALMIE RIVER	6	97	124
SKYKOMISH RIVER	3	93	117

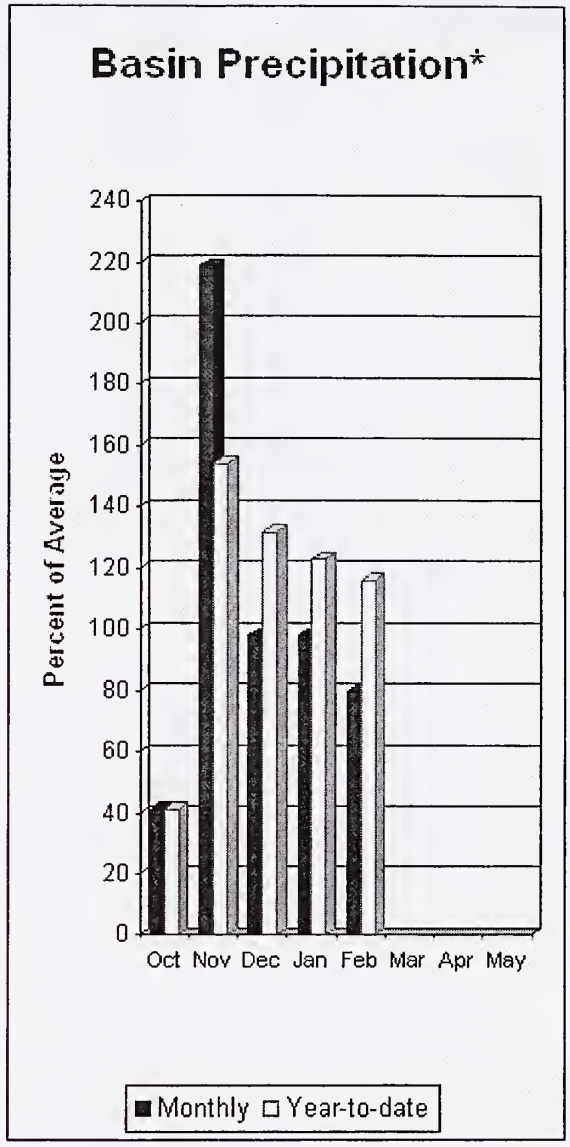
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

North Puget Sound River Basins





*Based on selected stations

Forecast for Skagit River streamflow at Newhalem is 106% of average for the spring and summer period. February streamflow in Skagit River was 92% of average. Other forecast points included Baker River at 105% and Thunder Creek at 105% of average. Basin-wide precipitation for February was 80% of average, bringing water-year-to-date to 116% of average. March 1 average snow cover in Skagit River Basin was 114%, and Nooksack River Basin was 132%. Baker River Basin aerial snow surveys reported 133% normal snowpack. Rainy Pass SNOTEL, at 4,780 feet, had 35.8 inches of water content. Average March 1 water content is 38.2 inches at Rainy Pass. March 1 Skagit River reservoir storage was 100% of average and 60% of capacity. Average temperatures for the basin were slightly above normal for both the month and the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
THUNDER CREEK near Newhalem	APR-JUL	224	239	250	107	261	276	234
	APR-SEP	320	338	350	105	362	380	333
SKAGIT at Newhalem (2)	APR-JUL	1835	1963	2050	110	2137	2265	1864
	APR-SEP	2114	2255	2350	106	2445	2586	2217
BAKER RIVER near Concrete	APR-JUL	765	839	890	108	941	1015	828
	APR-SEP	953	1040	1100	105	1160	1247	1050

NORTH PUGET SOUND RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ROSS	1404.1	813.8	750.4	818.3
DIABLO RESERVOIR	90.6	87.1	86.4	85.7

NORTH PUGET SOUND RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SKAGIT RIVER	15	108	114
BAKER RIVER	3	112	133
NOOKSACK RIVER	2	116	132

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
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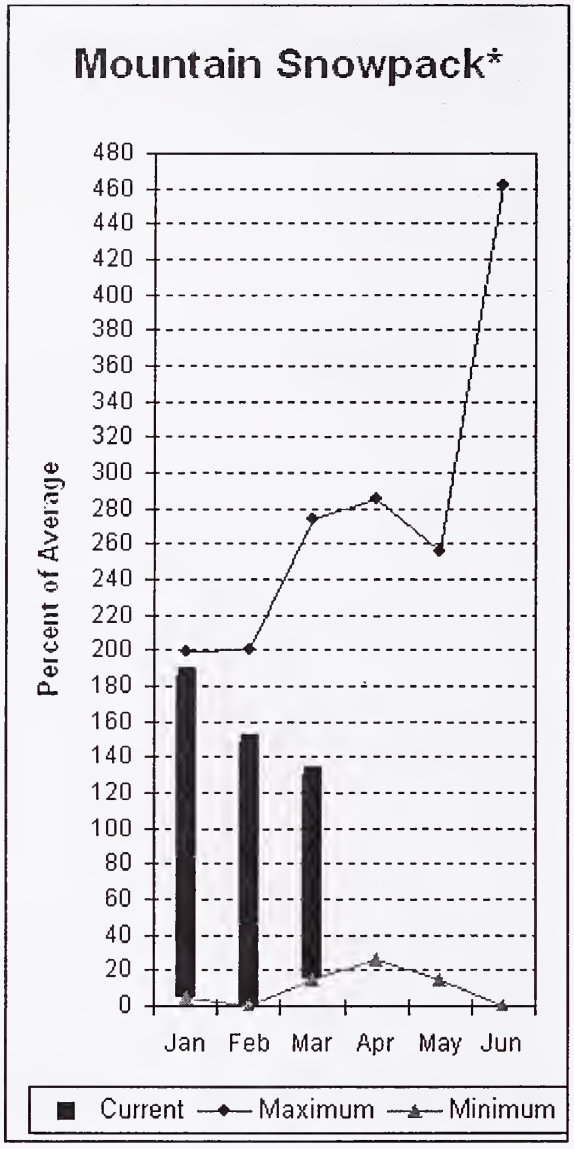
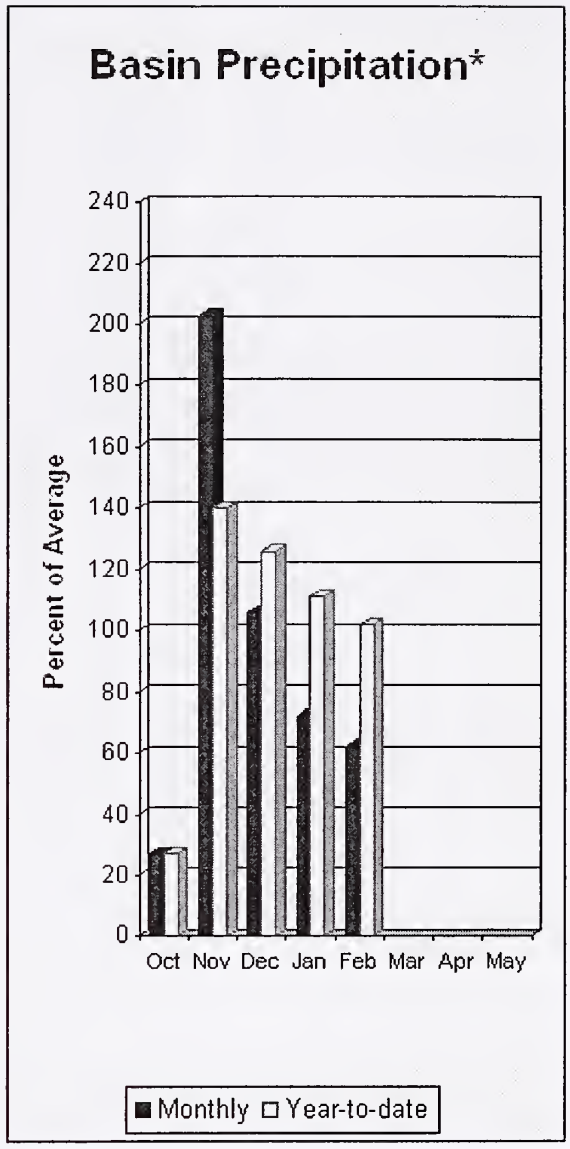
Olympic Peninsula River Basins





*Based on selected stations

Forecasted average runoff for streamflow for the Dungeness and Elwha rivers is 105% and 102% respectfully. February runoff in the Dungeness River was 67% of normal. Big Quilcene and Wynoochee rivers should expect near average runoff this summer also. February precipitation was 62% of average. Precipitation has accumulated at 102% of average for the water year. February precipitation at Quillayute was 8.77 inches. The thirty-year average for February is 12.35 inches. Olympic Peninsula snowpack averaged 130% of normal on March 1. Temperatures were near average for February and for the water year.

For more information contact your local Natural Resources Conservation Service office.

Streamflow Forecasts - March 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
DUNGENESS near Sequim	APR-SEP	143	153	160	105	167	177	152
	APR-JUL	117	125	130	105	135	143	124
ELWHA near Port Angeles	APR-SEP	444	486	515	102	544	586	503
	APR-JUL	376	408	430	103	452	484	419

OLYMPIC PENINSULA RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

OLYMPIC PENINSULA RIVER BASINS
Watershed Snowpack Analysis - March 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
OLYMPIC PENINSULA	6	139	130

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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The Following Organizations Cooperate with the Natural Resources Conservation Service in Snow Survey Work*:

Canada	Ministry of Sustainable Resources
	Snow Survey, River Forecast Centre, Victoria, British Columbia
State	Washington State Department of Ecology
	Washington State Department of Natural Resources
Federal	Department of the Army
	Corps of Engineers
	U.S. Department of Agriculture
	Forest Service
	U.S. Department of Commerce
	NOAA, National Weather Service
	U.S. Department of Interior
	Bonneville Power Administration
	Bureau of Reclamation
	Geological Survey
	National Park Service
	Bureau of Indian Affairs
	Recourse Conservation & Development Councils
Local	City of Tacoma
	City of Seattle
	Chelan County P.U.D.
	Pacific Power and Light Company
	Puget Sound Power and Light Company
	Washington Water Power Company
	Snohomish County P.U.D.
	Colville Confederated Tribes
	Spokane County
	Yakama Indian Nation
	Whatcom County
	Pierce County
	Kalispel Tribe of Indians
	Spokane Indian Tribe
	Jamestown S'klallum Tribe
Private	Okanogan Irrigation District
	Wenatchee Heights Irrigation District
	Newman Lake Homeowners Association
	Whitestone Reclamation District

*Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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Washington Water Supply Outlook Report

Natural Resources Conservation Service
Spokane, WA